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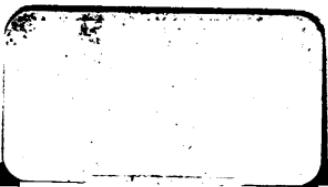
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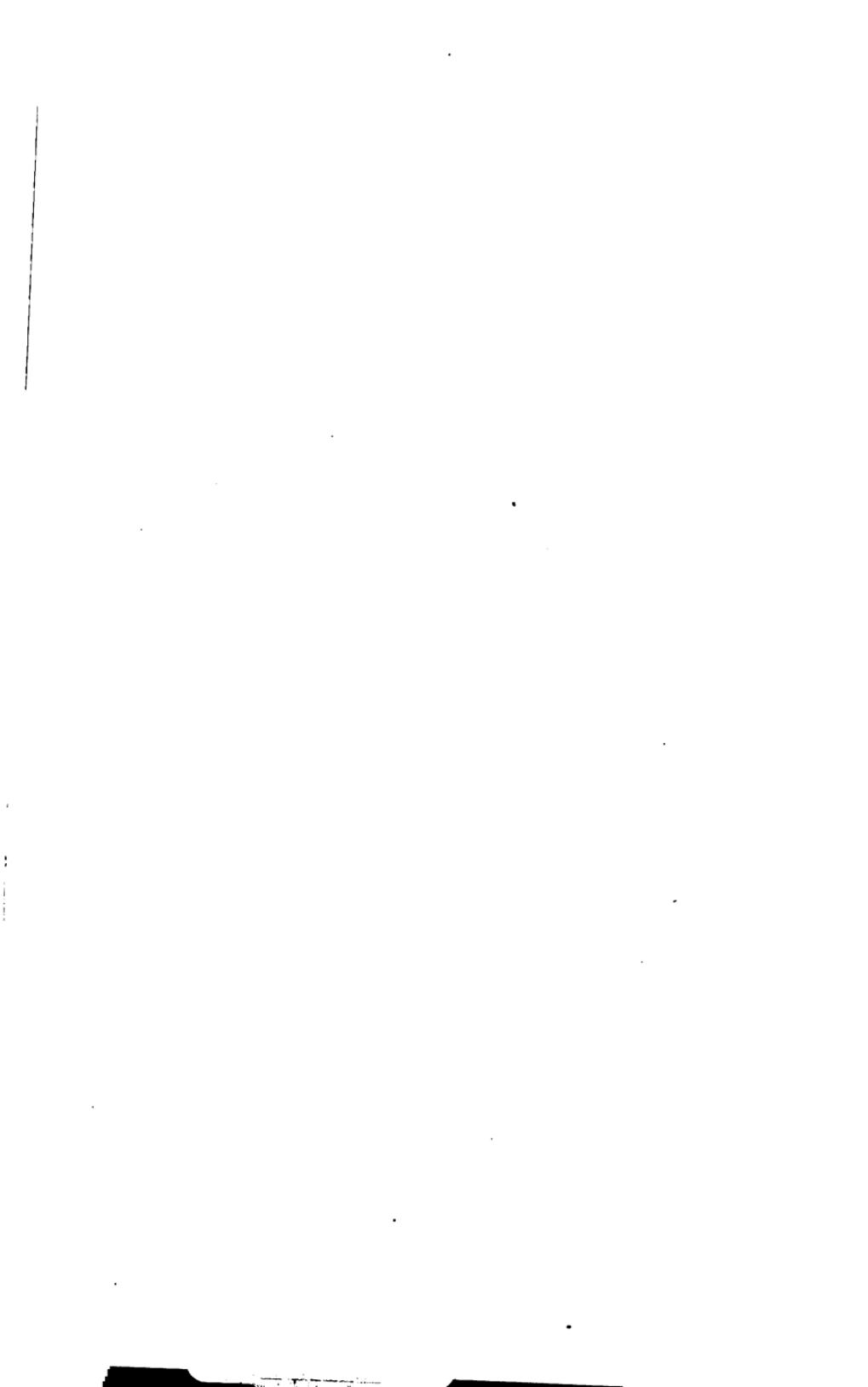
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THE LOG OF A SEA ANGLER



THE LOG OF A SEA ANGLER

Sport and Adventures in Many Seas
With Spear and Rod

BY

CHARLES FREDERICK HOLDER

*Author of "The Big Game Fishes," "The Story of the
Fishes," "The Life of Charles Darwin,"
etc., etc.*

"In gulfs enchanted, where the siren sings,
And coral reefs lie bare."



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THERE is not any excercise more pleasing or more agreeable to a truly sober and ingenious man, than this of Angling; a moderate, innocent, and salubrious and delightful excercise: It wearieh not a man overmuch, unless the waters lie remote from home: It injureth no man, so that it be in an open large water; he being esteemed a Beast rather than a Man that will oppose this excercise; neither doth it in any way debauch him that useth it: The delight also of it rouzes up the Ingenious early in the Spring mornings, that they have the benefit of the sweet and pleasant Morning-Air, which many through sluggishness enjoy not; so that Health (the greatest Treasure that Mortals enjoy) and Pleasure go hand in hand in this excercise. What can be more said of it, than that the most Ingenious most use it?

John Worlidge, Gent., 1675.



PREFACE

THE incidents of this "Log" are culled mainly from my experiences during a continuous residence of five or six years, winter and summer, on the extreme southwestern portion of the Florida reef, where Loggerhead looks into the west. As a rule, Northern anglers in Florida leave the various fishing-grounds in April or May; hence the best fishing, in June, July, and August, also the season of intense heat and mosquitoes, are missed.

I spent a part of each day drifting over the great coral reef with a party engaged in making a study of the growth and development of coral reefs, a feature which lent an additional zest and interest to what otherwise would have been mere fishing days. As it was, the fishes caught, the corals, shells, and gorgonias collected, were sent to the Smithsonian, and collections of corals and other objects donated to various institutions of learning throughout the country by Dr. J. B. Holder, who made here many new and important discoveries regarding the growth of corals indigenous to this portion of the reef. To this have been added my sea-angling experiences on many different trips to Florida, on the outer reef, and in other localities from Maine to California.

I have paid particular attention to sport with the Florida grains or spear, which so far as I am aware has received scant attention, if any, from American writers on contemporary sport. The grains, the long, slender, pliant harpoon of the reef, has afforded me endless sport, and I commend it heartily in taking large fishes, turtles, etc. I can conceive no more striking or picturesque figure than Long John sculling silently with his left hand, poising the long grains-pole in his right, "conjuring" the big Bahamian barracuda within easy reach by the clever manipulation of the oar; or of Bob tossing the pole high in the air, to see it turn and drop on mullet or turtle, as the case might be. Graining was not only sport to my friends of the far outer reef; it was an art.

I have hoped so to shape the "Log" that it might be suggestive of fair play to the sea fishes and considered, in a sense, a plea to the inexperienced angler never to kill a fish that he cannot use,—the Golden Rule of all true anglers, the gentlemen who troll and cast on the great fishing-grounds of America. The main portion of the "Log" has appeared as a serial in "Forest and Stream," and some portions of it in the "Century," "Scribner's," the "Metropolitan," "Cosmopolitan," "Outing," and "Outlook" magazines, and in the "Badminton" of London.

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THE LOG OF A SEA ANGLER



THE LOG OF A SEA ANGLER

CHAPTER I

THE OUTER REEF

*Going South. Key West. Crab Camp. The Coral Reef.
Boatmen. Charms of Tropical Life. East Key. Turning
Turtles. Myriads of Gulls.*

ONE glides gently from the snows of winter into the lap of spring in going down the Atlantic coast in the former season. We are menaced with ice fields off Delaware Bay. A day or two later something undefined happens, and a butterfly comes fluttering aboard, blown off shore with the odors of verdure from low-lying Florida to tell us the story of summer and the fountain of eternal youth. It is then that we take out the rods and talk over the fishing with a sympathetic disciple of Ananias, who is also on the trail of the tarpon or something else at Pass Christian or somewhere along the shores of the delight-makers.

While we are wrangling over the height of kingfish leaps, a large shark comes alongside. He

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has a pronounced notch in his dorsal fin, and our skipper informs us that the same man-eater has followed him for several months. This is serious; one of the crew shot away his dorsal fin, and it is supposed that the great creature is on his trail.

Key West rose out of the silver sea last night, and I am in the heart of a cocoanut grove, where the soft wind plays upon a thousand æolian harps, and the musical rustle sounds like gentle rain. The air is like velvet on the cheek, and filled with the perfume of innumerable flowers. Surely the fountain of youth is not far away in the grove, where the mockingbird sings all day and night. Sometime during the evening the boys from C.'s plantation serenaded me, and when they came in to drink my health, I noticed that they had scarlet passion vine blossoms wound about their heads. Their soft voices, the tinkling of guitars, banjos, and triangles, the deep bass of a conch shell, gave a coloring to the scene that was purely tropical.

We outfitted and sailed on a little steamer for Garden Key, where they welcome strangers. That night S. took me down to the "quarters" to look up a boatman, and we found "Long John," Bob Rand, and Chief playing seven-up by the light of a single candle. Between them stood a pitcher of water and a small bottle of a well-known and patent "pain-killer," which served as the not over-joyous tipple. Bob, with true politeness, pushed

the latter toward me, but I declined ; self-preservation is the first law of nature. They each poured out a large spoonful, filled up the glass with as much water as their several consciences permitted, rose, and drank my health. The trouble was obvious,—there was no whiskey on the key.

The three men are characters. "Long John" is six and a half feet in his stockings, which he never wears ; is thin beyond understanding ; his face is red as a ruby ; even his little eyes look burned by the pain-killer. John's hair is dyed black, or rather green. Bob is also red, but shorter ; and Chief would be, but he is a Seminole of a pure type,—not the stoical, morose Indian you read of, but a good-natured, jolly fellow, always laughing. How a man can look so pleasant on an habitual diet of pain-killer is one of the unsolved mysteries of the reef.

I intended to engage one man, but took them all, as they are partners in a sailboat called the "Bull Pup." The men are to hunt up fishing grounds, take me out, and do the cooking in camp on the various keys.

To-day I took a survey of the reef in a rowboat and found it a perfect fishing ground. Garden Key is thirteen acres in extent, and lies in the centre of a growing atoll. A deep blue channel surrounds it, and the navies of the world could float here if the channel was wide enough to swing them—a perfect harbor for vessels of the transport size.

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To the west, three miles, lies Loggerhead ; to the southwest, Bird Key ; to the northeast, East Key ; Middle and Sand keys, all capped with bay cedars, lying like gems *en cabochon* in a setting of turquoise.

We sailed for East Key early in the morning ; reached it after a two hours' run. The Bull Pup is well named. She wrestles with every wave and fights it out. I wish I had increased my insurance before I left the mainland. She is about twenty feet long, with a full square bow, a small cabin aft which has more odors than anything I have ever met. At first I thought it was one,—old bilge ; but I believe I counted fifty, then gave it up. Amidship is a large well into which we toss our fish, so none are wasted. We ran up into the lee of East Key at noon ; and found it hot, but not unpleasant. The island contains about five acres, the brush coming down to within one hundred feet of the water, affording a good sandy beach as white as snow, and made up of ground coral and the limy secretion of a seaweed. It is filled with crab-holes (spirit crabs), so white that at first I could not distinguish them. When I lay down and remained perfectly quiet, they came out by hundreds, eyed me for a while, then began to advance, climbing upon my legs and arms ; but the moment I stirred, they disappeared like magic.

The men pushed into the hot bush, I following, and presently found a clearing near some

cactus. Here we pitched the tents while Chief cut a quantity of branches which he thrust into the ground, forming a sun-shelter, a *ramada*. By night we were in shipshape, the Bull Pup anchored offshore, the dinghy hauled on the beach. I doubt if I can get used to the terns. The moment we landed they rose in such numbers that I could hardly see through them, each screaming at the top of its voice, floating over us with a particularly graceful motion, with bills pointed downward. Many of them are sooty terns, a few noddies, dark mauve with white heads. The terns nest in the sand anywhere, while the noddy builds a rude nest much like that of a dove. Its egg is nearly white, while that of the tern is very speckled.

There is no water on the island, but Bob, after taking his bearings, dug up a five-gallon keg from the sand where he had planted it some months before. We used that, and when we left, filled it from our supply. Bob said he kept it there, as one time he was caught offshore in a bad hurricane and blown on to East Key. He got ashore, but nearly perished for want of water before he was found. Ever since, water has been kept here and all the men have its bearings. The eggs are so thick that it is impossible to walk in the bush without stepping on them; there must be tens of thousands. At night the birds settled down, and the only sounds were the peculiar ringing of the water on the sand hard by and the boom and

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crash of the sea on the windward shore, — a melody that soothed me to sleep on my bed of sweet-smelling bay-cedar boughs.

How long I slept I don't know, but I was awakened by Chief stumbling over the tin plates, and his artistic swearing in Seminole. The men were trying to get off without disturbing me, to turn a turtle for breakfast.

"Green turtle mighty nice," said Chief.

"Turtle balls a doggone sight better," put in John.

"Calipee for me," said Bob.

As for me, why, the turning of a turtle was what I came there for; so I shook the soldier crabs out of my clothes, and we filed out of the bush and headed for the beach. Chief led the way, and went directly down to the water's edge, where the ripple of the waves made music and sent millions of phosphorescent lights darting here and there, or stranded some large dazzling light on the beach.

We walked along silently in single file, splashing our bare feet in the water, wading in the shallows for nearly half a mile, when suddenly Chief stopped, and, leading up from the water over the gleaming sands, I saw a double trail, as though some one had lain flat, and with a swinging motion had attempted to make a path up the beach. We followed this up on a run, and not ten feet from the bush came upon a green turtle which must

have weighed 250 or 300 pounds. She did not move or pay any attention to us ; she was laying her eggs in a hole about two feet in depth, occasionally scraping the sand. We stood watching her, when suddenly she made a rush for the water, her flippers flying like windmills. Not being familiar with the work, I got on the wrong side and had my eyes and mouth filled with sand, and fell upon the reptile's back, which would have carried me along easily ; then Bob and Chief grasped her on the same side and lifted, and I added my strength, turning her over where she beat her breast with sturdy blows, as a gorilla is said to do when perceiving its prey or enemy. Bob quickly slit the flippers with his knife, making a small orifice, and with a piece of rope yarn tied the pairs so that they could not move. A more helpless object than the turned turtle does not exist ; its solid back, so good a protection from some enemies, here prevents it from turning.

Leaving our game, we returned to the water and took up our march again, just at the edge. The moon was half full, and light clouds were moving from the west, partly hiding it,—an ideal condition of things for turtle-turning, as on a clear night a turtle can see a man two hundred yards off, so brilliant is the star and moon light here. As a test, I found that I could read the large print of a paper by the light of the moon ; and one night I improvised a better light yet. I caught a

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large jelly-like creature called Pyrosoma, a marvelous light-giver, and placing it in a tall jar, Bob stirred it with a twig while I held the book ; and I may say that I have read by the light of a jelly-fish,—which reminds me that some years ago Dr. Dubois of Paris sent me a photograph which he had taken by the light of one of the phosphorescent insects.

We had gone about an eighth of a mile when Chief, who was in the lead, stopped and lifted his hand. The peculiar musical trill of the sands, the tinkling of the water that gleamed about our feet, the distant cry of some far-away bird, the occasional crash of some great fish a long way off, were the only sounds. But peering over Chief's shoulder, I made out an indistinct object standing in the phosphorescence, not one hundred feet away ; then I heard a distinct hiss, like escaping steam. Not a move was made. That the turtle was suspicious and had stopped at the water's edge was evident, and doubtless she would turn and make off at the slightest alarm. So we stood and literally held our breath.

Suddenly, I had an uncontrollable desire to sneeze. I smothered it as best I could, but the quiet was disturbed ; we saw the dim shape turning, and rushed ahead as one man. The animal had completely turned, and was in about a foot of water when I tripped over its broad back and fell sprawling upon it, the fore flippers striking the

water like the flails of a windmill, while the men tried to seize them. In her struggles she moved ahead rapidly, and as the water deepened suddenly, I found myself drenched, and received several blows in the face, which threw me off. Chief now fell upon the turtle and grasped her at the back of the neck, and endeavored to lift her, so that John and Bob could grasp the flippers; but the big creature seemed twice as large as the other turtle,—was indeed a loggerhead. Chief called to me to keep away from her head, as she would bite, so I slipped behind. At that instant the turtle made a vicious rush, and we all slipped into deep water. The turtle diving took Chief under and disappeared, the latter coming up immediately and swimming back.

I had heard that turtles were stupid, but my observations do not carry out this theory, and I have watched them many a night. A green turtle, when she came up to breathe, thirty feet offshore, first stopped and looked around. Seeing the coast clear, she swam in and grounded; then again looked around and came out of the water and listened; at least, this is what I assumed was the mental process. I was lying not fifteen feet from her; she must have seen me, but doubtless thought I was a bunch of weed; for after apparently listening she moved up the beach, a hard and laborious process. She stopped about twenty feet above high-water mark, then moved along the brush ten

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feet or so, then in a part of a circle, facing the sea, she began to scrape up the sand with her flippers. The operation of laying fifty eggs occupied about twenty minutes, and she was out of the water three quarters of an hour. When she had finished, she moved around clumsily, and appeared to push the sand over the eggs, wheeled about over the spot so that every trace of her presence was destroyed ; then instead of going directly down from the nest she clambered along the sand for a distance of thirty or forty feet, I going with her, but lower down ; then she turned and made for the water quicker than I could have believed. Half-way down she met me ; I sprang upon her broad back, and she carried me to the water's edge with ease ; there I let her go, she insisted upon it. I hunted up the eggs, and had difficulty in finding them, though I had seen them laid. The taste for turtle eggs is an acquired one ; I am confident I shall never attain it. The men eat them raw with relish, and are particularly fond of the dried immature eggs.

We reached camp at half past four, having cut up the turtle and I having taken my first lesson in carving one. I brought home about ten pounds of meat as my share, Bob began to cook calipee (fat), Chief to make turtle balls (a sort of hash), and Long John to prepare a steak. It was every man for himself, and I compromised on some of all. Our breakfast, considering that we were at the jumping-

off place of America, one hundred and fifty miles from almost anywhere, was worth remembering: fried grunts, taken alive from the well of the Bull Pup, roasted young crayfish, green turtle steak, green turtle balls, green turtle calipee, hoe cake, with plenty of "hoe" to it, coffee, "Long John's special" fried potatoes, snipe roasted over the coals.

Our camp was primitive. A tent for myself, bed of bay cedar boughs; the men preferring the *ramada*. We had rubber blankets, in case of rain, an old stove, or the top of one, dug out of the sand where Bob had cached it some time in the past; so we had some of, if not all, the comforts of civilization. I was surprised at the intimate knowledge the men had of the island. They knew where every cactus patch was. I discovered this when we were crossing it. I would enter what appeared to be a lead, and Bob would say, "This yer leads into a patch of cactus," and it did. I learned later why they knew it so well; they had dug over about every foot of it for Spanish booty that is supposed to have been buried there by pirates. On the east side a big galleon was wrecked some years ago, when galleons sailed the Spanish main, and an old sea captain, whom I met later, found a thousand dollars on the beach; so once a year Bob retired to East Key, fortified himself, and dug.

At the first appearance of the sun (and it came

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up through vermillion skies, over a sea of glass), the birds began their babel of cries, which, as they discovered our presence, became a roar beyond belief in its intensity, and at times maddening. Yet it was possible to stop it for a second or two. When I shouted at the top of my voice, every bird became silent, and with one accord the vast swarm swooped down several feet, then rose again to continue the pandemonium. There was one revenge, — their eggs were excellent, and we ate them in every style. They were also a ludicrous source of danger when one was walking through the bush with hundreds of sitting or laying terns struggling upward. Many dropped their eggs in mid-air, and Long John received one of these missiles fairly on the top of his head. The glittering generalities in which he indulged need not be recorded. Long John had a superior air, but it did him an injustice,—he was just a plain man.

CHAPTER II

THE HOME OF THE SPADEFISH

The Bending Rod. An Assortment of Game. Cowfish with Horns. Porcupines at Sea. Rod Fishing. Yellowtail. Strange Fish. Grunts, etc.

ALL these islands are the summits of submerged plateaus of coral sand that reach out from the key in all directions, a shoal of white, here and there covered with branch coral or moss, gradually deepening, then rising again to a fringing ridge of coral that forms a sort of barrier to the deep water of the channel. At intervals the channel breaks into the lagoon or shoal, its sides protected by a *chevaux de frise* of coral spikes. The edge of these channels was an excellent fishing ground, while the shallow flat or lagoon was not to be scorned, and for this vantage ground we started in the commodious dinghy the second day after our arrival.

The fishing began by taking bait. We poled around the big coral heads, and I counted a number that were eight feet across and four feet high. Many of the old ones were eaten out in the centre by some boring worm and other agencies, and afforded a shelter for countless fishes. The crayfish, about as large as an ordinary lobster, and

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very similar in shape, with whips long and serrated, no large claws, and a yellow dress, lived under the edge of these heads with their vulnerable tails tucked in out of sight, but their long whips protruding, their eyes out in a most telltale fashion. It is an easy matter to lower the two-pronged spear or grains, and strike them in the head, then jerk them from the hole; and in half an hour I had picked out twenty. This is the bait of all others on the reef; few fishes will refuse it, and the majority fight for it.

It was interesting to see Chief "fix" a crayfish. He wore behind his back a large dirk in a leather scabbard, and with one blow of this he decapitated the crayfish and tossed its head into a barrel for "chum," then, deftly holding the tail sidewise, he struck it with the back of the blade, splitting it across the back, after which he skinned it and cut the delicate red meat into four or five baits, depending upon the size of the fish to be caught. By the time I had grained a crayfish, he had the last one cut up and laid on a board.

We proposed anchoring on the edge of a deep channel near some large coral heads in the centre of as charming a submarine garden as can be imagined,—one that graded rapidly off into deep water, where were suggestions of large and unknown game. Near at hand the bottom was covered with beautiful leaf coral, broad and palmated branches of olive hue piling one upon the other,

rearing upward like the antlers of a moose. Near by, the giant head of another coral, and between them and all about, plumes and gorgonian fans of great beauty in shape and color, waving in the mysterious tidal currents of this tropical sea. I was peering through a glass box into this garden of the sea and had forgotten the fishing, until reminded by Long John that the bait was ready. What was the game? Ye gods and fishes! What a host these men held forth!

"There's hogfish, grunts, cobia, rabirubia, snappers, porgies, groupers, tarpon, sharks, spadefish, barracuda, jacks,—anything you like, sah," grinned Chief, as Long John got the "killick" ready and Bob held the oars.

"Drop it right in this garden," I said. So down it sank in about twenty feet of water over the splendid plumes of gorgonias that flashed a hundred tints in this turquoise sea.

I had a rod of greenheart that weighed about ten ounces, one built for eight or ten-pounders, and equipped with a reel whose notes many a singer might have envied, so silvery were they; indeed, I have seen that reel stir men's souls far beyond the power of a mere human voice. The line was a spiderweb-like device of linen. The only incongruous feature was the hook. It was not to the manor born; not fine and delicate as the rest of the tackle, nor was it large, merely a small O'Shaughnessy, a number 4/0, which means a small hook

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with a very stout shank. On this I wound a filament or cross section of the crayfish, the red or scarlet under-skin holding it on. This I cast into the azure waters of the garden and watched it sink, while my solemn companions sat and doubtless wondered what in the name of all the gods was coming next.

Here I would claim a vast and fathomless desert region separating angling from mere fishing. The fisherman casts his lure with intent to murder the game, and the chances are that he will use a sinker to make sure that it reaches the home of his victim. The angler rather hopes his fish will have the advantage, or else why this delicate tackle? The fisherman is possessed of a desire to coin gain from his catch, while the angler merely wishes to try his skill against that of the game; hence he seeks the hardest fighter, the gamiest fish.

I fain would be an "angler" on this bright day in these gardens of the sea, and when I asked my three men not to cast their big grouper hand lines to desecrate the spot, I doubt not they thought me mad. They lighted their pipes and smoked black plug tobacco from Trinidad that had paid no duty. I cast astern, and as the white bait slowly sank, up from the bower of corals, out from the "gulfs enchanted," rose a dazzling throng,—angel-fishes, porcupines, grunts, and a vision of loveliness, a fish a foot in length, with a yellow band from bow to stern. Ah, how my grim friends started

as the reel gave out its melody and sang the horn-pipe of the fishes, and the yellowtail danced ! The reel sang high, low, deep ; the resilient rod leaped back, bowed to the waters, then fairly trembled as this splendid game shot along the azure sea, cutting the foam to turn and plunge down, scattering the curious throng, to rise again and come in to the *click, click, click.* How it broke away repeatedly, trying to catch the cobweb line unawares ! but there was always the *click* of the reel,—that warning of danger,—and the line always gave at just the right time. So the yellowtail raced up and down to the music; tried all the tricks but leaping, dashed around the boat in a caracole, and then came to the net and was lifted in, as splendid a game fish as the Mexican gulf can boast.

Again I took one, the rabirubia, then a small grunt, a fish as common in its variety as the Smiths, as there are red grunts, black grunts, striped grunts, yellow grunts ; indeed, I believe I could have filled the floating fish-car which we towed alongside with countless grunts of different shapes and colors.

I now increased the size of my bait and cast fifty feet out into deep water. I caught Chief winking at Bob. They knew my line was gone this time ; but when that rod bent into a circle and the line hissed and did not break, they were delighted and amazed. I had game that was really too much for the tackle ; despite all my efforts, it carried my rod deep under water and for a moment held it in that disgraceful

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position. Whatever it was, it made a gallant fight,—ran directly away down the hill of the coral reef, taking at least two hundred feet of line; then I stopped it to the laughter of the reel. Then turning, it came in like the wind, the merry reel eating up the line by inches, feet, and yards, to stop suddenly as the fish broke away. But this time I stopped it, the little rod, bending, protesting bravely.

“Must be a grouper,” said Chief.

“Seems more like a onery parrot-fish,” suggested Bob, while John was so intent on watching the rod that he did not even express an opinion.

The reel began to cry *ze-e, ze-e, ze-e-e-e-e*, and presently a curious striped angelfish-like creature shot across the line of vision and a moment later was lifted in, a ten-pound spadefish.

“Well, I’ll be dogged!” remarked Long John briefly.

“Must be some conjurin’ in that rod,” said Chief; “it regularly fooled him.”

The spadefish bore some resemblance to the large angelfish so common here, but it was another fish, more active and of different habit; while as for game and fighting qualities, we who had watched its struggles gave it first place.

In looking down into the marvelous blue water filled with fishes which rose to meet the bait like a band of actors in many costumes, one could not fail to notice their marked individuality; the grunts of high and low degree, the splendid arraydo,

Ronco carbonero, the blue grunt, the blazing yellow grunt, black, red, white, golden, and scarlet grunts, with many names. What Long John called the red grunt, Chief, who perhaps had a dash of Spanish blood, said was Boco colorado. Of all the small fishes taken in this delightful region, the grunts appealed to me the most. They are all beautiful, often defying description in their splendid vestments of color, challenging the artist to reproduce them. They are the tamest of all fishes, and possess that something for lack of a better name called individuality. Their eyes follow one's every movement, constantly on the alert, entirely different from the glass-eyed barracuda, mullet, sardine, and other "fixed-eyed" fishes.

In a cast for another spadefish I had the misfortune to hook a sea porcupine which I saw take the bait. It appeared to be about a foot in length, and its nature would not have been suspected; but when it reached the surface it began to take in air with a sucking sound, increasing in size until in a few moments it was as large and rotund as a boy's football, presenting a most uncompromising array of sharp spines,—a marine porcupine, indeed. When cut away, it sailed off before the gentle breeze upon its back, its short fins working vigorously, sending it slowly this way and that. I watched it drift several hundred feet, when it gradually pumped out the air and disappeared. In walking along the shores of the key, I often found

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small dry porcupine fishes fully expanded like toy balloons. They had been washed ashore in gales, and had died retaining the oval shape, with spines *en charge*.

Fishing here even with a rod was liable to drift into a slaughter; but we always had a car alongside into which the available fish were thrown, the others being released. The pain experienced by fishes when hooked doubtless is minimized. I could see grunts which I hooked vigorously shaking their jaws, and the wound would appear as a dark area; yet they still mingled with the throng, and would soon dash after the bait again. Undoubtedly these fishes had never seen a boat or line before; certainly they were very familiar, and in shallower water, where I could reach down and touch the coral, I induced small cowfishes and porcupines to approach and swim through my fingers. The former, commonly known as trunkfishes, were among the most remarkable in this wonderful fishing ground. They were very tame, and were the armadillos of the sea, fairly boxed up in an armor that is solid and bone-like. Out of this projects the absurd tail, the dorsal and anal fins, all of which have peculiar motions. The tail works like the screw of a steamer, forcing them along, while the side fins move in a conical flying motion. When taken in the hand, a fish would roll its eyes at me in a deprecating manner, and did not appear to be at all disturbed by the change; in fact, I found a

cowfish, which had accidentally been left in the boat all night, alive in the morning, and when tossed overboard, it soon recovered.

The name cow refers to two pronounced horns placed about like the horns of a cow, while there are others at the juncture of the tail, and on the lower surface; so the cowfish is rarely attacked—that is, with success—by predaceous fishes. Long John had a penchant for cowfishes, boiling them in the shell in salt water as he would a crab or crayfish. A large cowfish served in this manner, or better, deviled in its own shell, with chili, is a dish that deserves the attention of the epicureans.

We slowly rowed inshore, and while I hunted for turtle nests, the men cooked dinner. Punching the sand with a sharp stick, by good luck I ran upon a nest, the young, to the number of twenty or more, recently hatched out, and slowly making their way down to the sea. I filled my pockets with them, and carried them back to camp, there observing their remarkable instinct. I placed them in a small inclosure two feet across, and presently noticed that they all congregated on the water side. They were repeatedly changed, but always went back. The sea was noiseless and invisible, yet these hour-old green turtles, no matter where placed in the bush, invariably turned in the direction of the nearest water.

“How do you explain that?” I asked the men.

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John thought they smelt the water, while Bob declared that they were "jest natchrally born that way," — a decision at once judicial and scientific, in which I fully concurred.

CHAPTER III

GRAINING THE BLACK SHARK

*Drifting over the Reef. Diving for Queen Conchs.
Fan Shells. Hauled Overboard. Towed by Sharks. Crabs
of Many Kinds. Crab in a Pipe Bowl.*

THERE was nothing more delightful on this fishing ground than to go out with the dinghy at sunrise, stand in the bow, grains in hand, one man sculling slowly, the others amidship, and watch the marvelous panorama of the lagoon, gazing down into the splendid vistas. No forest of the land has more beauties than this forest of the sea. Everything was in miniature, and one might compare it to a Japanese garden where everything is dwarfed and the trees stunted, as the leaf coral, with branches four feet across, resembled the cedars of Japan, while the bottom was covered with gorgonias of countless hues.

Suddenly, as though the vista was cut with a knife, this would end, and through the waterbox would be seen a clear sandy bottom,—the home of the great queen conch and others. The water was about fifteen feet in depth, the sand a delicate mauve without the slightest object, seaweed or coral, to break its perfect tone; yet suddenly the

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field of the gorgonias would begin again; or perhaps a growth of algæ; but there was a belt of this clear bottom about nearly every key.

In drifting along one morning I saw a peculiar mound, apparently a foot across, and recognized the large queen conch (*Cassis*), a rarity even here. None of the men appeared to be anxious to go down. John said it was "too dogged near the channel for comfort," meaning that he was afraid of sharks. Chief doubted if he could hold his wind that long, while Bob explained that the "Conch wan't good for anything, anyhow."

That my men were not divers was evident, so I delegated John to hold the grains and prod any man-eater that came along, and while the others held the boat directly over the spot, I stepped over and went down. The water at the surface was warm; at ten feet cool, and at the bottom — perhaps twelve or fifteen feet — decidedly cold by contrast, — a delightful series of transitions. So clear was it that for many feet about various objects could be seen, and grasping the conch I turned it quickly to see if it was alive. To my delight I saw the rich red mouth and platform and the animal parts squeezing themselves in; then, doubling up and placing my bare feet on the sandy bottom, I shot upward and rose from the sea, bearing a rich trophy.

It was a splendid specimen, perfect in shape and color. The shell (*Cassis*) is sometimes seen cut

into cameo, and common, I understand, in the South Pacific, but rare in Atlantic waters. This experience opened up the delights of diving in these clear waters, and I determined to see the great reef from below as well as from above.

In contemplating the animals of the sea, one ultimately compares the fishes to the birds, and other marine animals with similar forms of the land, and it does not take long to become convinced that the ocean is even more densely populated than the dry land. The inhabitants here were living on the slopes of a mountain; some were near the surface in the zone of coral; some intermediate, others in deep water, while others again lived in the open water, soaring continually, like the condor and eagles, always in search of prey.

Presently we came into smooth water ten feet in depth, the bottom covered with a growth of short-leaved coral and a lime-secreting alga. Here numbers of small conchs were found, and as the water shoaled, the ordinary conch (*Strombus*) appeared in all stages or ages. I dived and brought up one in each hand, sometimes three on one arm. As I neared the bottom, I could see them lumbering along with a peculiar hitching motion. The sabre-like operculum would be thrown out, dug into the sand, as an anchor or kedge, and the heavy shell "hitched" or jerked up to it. No color is more beautiful than that of the broad lip of the huge strombus. In its delicacy of pink it

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defies description, and would, doubtless, become a valuable article of jewelry could some means be devised to preserve the colour, which slowly fades. These shells were in demand as grouper bait, so I brought them up until weary, and I believe that I could have filled the boat. When the men cut them up a week or ten days later, I watched for the famous pink pearls, so valued, but did not find one. The method of opening conch is singular. The tip or back of the shell is cut around with a hatchet, and the immense animal taken out by a screw-like twist.

The charm of drifting over these gardens of the sea, now and then diving down into them, cannot be adequately described. John advised me not to go beyond the length of his grains, yet he could not recall that any one had been attacked.

As the men poled slowly along, I looking for queen conchs, or any rare animal that might afford an excuse to drop over and go down, the floor of the lagoon suddenly shoaled, and Chief called my attention to some jet-black spot coming into view.

“School of nurse sharks takin’ a siesta.”

I wanted a specimen, and still more to see them asleep, the question of sharks sleeping being a disputed one; so Chief put a piece of sail-cloth in the stern rowlock to deaden the sound and began to scull noiselessly toward the school. There were ten of them, seemingly, all jet-black, lying

in every position, well bunched, and not more than two or three feet apart. They were of good size, from seven to eight feet in length, and seemed to have more pliability than most sharks, as in their positions they were bent and twisted. Slowly and carefully Chief sculled until we were within three yards of them, then in perfect silence the dinghy drifted over the school. The water was not over eight feet deep, clear as crystal, and I could see the animals as plainly as though among them. Their heads were down or were flat upon the sand; and that they were asleep there could be little question. Had they been awake they would have darted away at the sight of the strange and menacing figures above them.

I raised the long grains, glanced at the line, then Chief knocked on the gunwale with his oars, awakening the sleepers. Each shark dashed ahead in the direction he was aimed, throwing the sand high into the watery atmosphere, creating a cloud which involved the entire school. I picked out one of the largest and sent the grains into it; then one of those peculiar unexpected things occurred: the line had a twist around the pole, and as I grasped it, to jerk it from the socket,—still holding the line,—the fish rushed violently and hauled me overboard; my next impression was that of being dragged under water.

The instinctive impulse when fishing is to hold on, and I obeyed it, and must have been dragged

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ten feet under water. Chief later said that he thought I had dived after the shark, as he saw me shooting along after it, "scaring him to death." But I came up in a few seconds, and, by bending back and presenting my chest to the water, I discouraged the shark in a short time; but when I threw myself on my side, it towed me at a rapid rate, and was badly demoralized.

It was an excellent and safe opportunity to test the power, strength, and towing capacity of a large nurse shark, so I indulged in the sport, the exciting pastime of shark-riding, my men following with the dinghy, shouting instructions, the trend of which was that I must not allow the shark to tow me into deep water. It carried me possibly one hundred yards, up and down, and I had the creature well tired out in that time, owing to the fact that it was all in shallow water.

If the shark could have reached the channel, it could easily have carried me down. It finally swam over a shallow sand pit, where I regained my footing, and slowly worked my steed in shore, with the aid of my men hauling it on the beach. This experience happened several times; that is, some of us were jerked overboard by these sharks; but it should be explained that we were standing on the little forward deck of a light boat. I can commend the sport as "lively" while it lasts.

The nurse, sometimes called the "sleeping shark," from the fact that it is nearly always ob-

served asleep, is a big, harmless creature, almost black or a dark reddish brown, with a small mouth and insignificant teeth. To contemplate one towing me about, its fierce rushes, its savage jerks, its doubling and turning, its frantic dashes to the surface, beating the water with its tail, would have impressed the innocent observer that I was the personification of daredevil courage; but a glance at the mouth of the monster would have deprived the scene of its dramatic effect. The nurse is a grubber, a coward; I doubt if it has the temerity to attack a big crayfish. The short-spined echinus and tough holothurian, or sea cucumber, are its prey. Of all the animals of the sea, this fish is the best "bluffer." It makes a splendid fight, and, from the standpoint of the layman, looks very dangerous; but the nurse is merely frightened. The shallow lagoon was its pasture; the nurses were a herd of marine cattle asleep, and they returned to about the same spot day after day. I rarely went on a drifting and diving excursion over the reef but they could be seen, always asleep, always running away in a state of frenzied alarm.

As we went ashore and ran the dinghy up the beach, hundreds of sand crabs ran in every direction — one of the most interesting features of the life of this isolated place. There were three or four kinds of crabs; most conspicuous, the spirit crabs which live in holes along the beach in countless numbers, and which mimic the sand in color;

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a big red and purple crab which lives in the brush; a hermit crab, also a brush-lover, while its young filled every small shell alongshore. All the large ones were bait of the best quality; but the crabs constituted the sanitary department of the island, and their raids on the birds were a constant source of interest and amusement.

Not far from camp I heard a vociferous crying, and on approaching found a noddy's nest being approached by crabs. I stood and watched the proceedings. The noddy, a beautiful bird of a delicate chocolate color, with mild brown eyes with a white top-knot, had brought a flying fish to its young, and all the crabs of the neighborhood were coming unbidden to the feast. There were bands of hermits ranging in size from a pea to others occupying the big pearly trochus shell as large as a top, all laboriously climbing the bay cedar tree. The large ones overran and knocked off the smaller ones, and there was a constant rain of shells from the bush.

As soon as they lost their hold, they would slip into the shell, which would drop, and the crab would immediately start for the tree again. The advantage seemed held by a large purple land crab, which lived beneath a neighboring cactus patch, several of which were slowly ascending, crawling over the cowardly hermits and brandishing their war-like claws in a menacing manner. Presently two reached the rude nest, where a num-

ber of hermits were stationed. One advanced boldly to the attack, and seized the head of the fish, while the young noddy held the tail, screaming and hissing vociferously, at which all the crabs made an advance. In the mêlée the young bird was outrageously robbed, illustrating the fact that the mother-bird fished not only for its young, but for the land crabs as well. I recall that Moseley describes the crabs of a Southern Pacific island as stealing the young rabbits from their dens, and carrying them off bodily.

The big hermit crabs were so interesting that I decided to become better acquainted with them; so I baited a tree with a dead grouper, and in a short time had secured a large number. They came from beneath the roots or leaves of a patch of cactus hard by, and were of all sorts and conditions of crabs,—large, small, and in all styles of shells, robbed and pilfered from some other crab or found along shore. Never was there such a community as theirs living together, each on the constant lookout to steal the other's home at the slightest provocation. That a hermit crab could be tamed there was little doubt, and in a short time I had a large one living in a pearly trochus shell, that would take a piece of fish from my hand and would sit for an hour looking at me, evidently trying to study out what manner of thing it was that *gave* it food while the birds fought against it. By heating the back (tip) of the shell,—a miser-

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able trick,—I obliged the crab to vacate its stolen shell, when its fear, its attempts to conceal its soft body, were laughable.

Bob had a broken clay pipe, and clearing this out, I placed it in the box with the crab. In a very short time the latter darted into it, and proudly dragged it about. I played the same despicable trick upon a marine hermit. Bob, as this crab was named (as he never said anything), became highly civilized, and later made a trip to the North, where he fell a victim to the cold weather, dying, doubtless, of some form of crab-pneumonia.

These crabs were all land hermits, but there were giants in the water. One I found occupying a five-pound strombus, or conch, shell, dragging it about with ease, its huge red shaggy claws filling the entrance — a menacing operculum.

CHAPTER IV

ON THE TRAIL OF THE SAWFISH

Dangerous Game. The Flying Saw. A Hard Fight. A Disappearing Spider. Casting the Net for Mullets. Tattooed by a Physalia.

MY guide once blew out the flambeau in a cave three miles under ground to give me a clear and definite idea of what absolute darkness meant. I realized on East Key, at night, what solitude was. It was very hot, nearly ninety degrees at midnight, and lying on the sand just out of the brush, watching for a green turtle, it was absolutely silent. The wind had gone down, the stars blazed like electric lights in the sky, and constellations were seen that are strangers to Northern eyes. I could see ghostly spirit crabs wandering over the strand, and lights on the surface of the sea, where some luminous animals wandered. Then the wind began to rise, the water along the sands giving out a low, sweet melody, a tinkling sound, and then a dim, far-away roar gradually came down the wind, telling of the sea breaking on the reef to the windward. A gull came in from the sea with a weird cry; a heavy crash sounded where some big fish jumped, and the wind began to moan and sough through the

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bush, the gulls taking to the air to see what menace was abroad. The stars disappeared one by one, an inky-black cloud shut in the night, and with a roar of mighty sounds a hurricane-like squall burst upon the island. The bushes were beaten to the ground, hundreds of birds were sent whirling through the air, sheets of water struck my face, while the sands rose like spectres, and like genii were whirled away over the water. Pandemonium was let loose, the spirits of the deep were invoked, and played havoc with sea and shore ; then as suddenly it passed on, the stars came out, and the normal state of affairs atmospheric came again.

We have cooled off ; the mercury has dropped five degrees, and Bob is making coffee. It has been my good fortune to see storms and squalls of all kinds, but nowhere do they come and go with such marvelous rapidity as in this out-of-the-way portion of the world.

It is not everywhere that a bird can be seen to lay an egg on the wing. I have been almost struck by such missiles several times ; and in walking through the brush, when the entire bird population is on the wing, one must keep a weather eye out. The tern eggs have begun to hatch, and one of the mysteries, at least to me, is how a mother-bird can tell her own offspring in such a swarm. I crawled to-day under and into the bush and filled a water bucket with eggs without moving from a space five by five feet.

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On reaching a lane in the bush I found a remarkable spider, as large as the end of my thumb, yellow and black, perched on a stout web that completely closed the way. As I rose to examine it, the huge spider began to swing to and fro, and in a few seconds disappeared before my eyes, owing to the rapidity of its motion. I watched it a moment or two, then its swing gradually subsided, and it slowly came to a standstill. A more clever defense it would be difficult to imagine; and that a spider-loving bird would be completely deceived was very evident.

Bob and I took the dinghy one morning and sculled out over the reef, while John waded along-shore with cast-net slung over his shoulder, with a weather eye out for mullets. He was a strange and picturesque figure, tall and lank. Bob said they had once used him as a jury-mast on a ship that was dismasted in a gale down by Trinidad. Suddenly he stopped, swung the net to the left, then to the right, and launched it in a broad circle over a school of mullets, which were presently shaken out onto the sands. Mullet of the right size, when properly cooked with its roe, is a delicious dish. Bob had poled the dinghy out near the channel, and we were moving slowly along near the heads, when I saw a long gray object passing directly across our path. It looked like a shark, but a moment later I made out a long gray snout, and then the perfect outline of the largest sawfish I had ever seen.

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It paid no attention to the dinghy, and, wishing to secure its saw, I drove the grains into it.

Have you ever seen a swordfish leap? It is the clumsiest of all motions, a slow rising and dropping back, a lift without the forward motion; this jump of the sawfish was almost identical. The whole fish came out of the water a foot or more, and the ugly saw swung around in search of the enemy, as the fish dropped back with a splash, sending the spray flying over us. I had about fifty feet of light line on the grains, and the fish jerked that over so quickly that I had just time to drop on my back, brace, and hold on to the piece of wood the line was fast to, when the shock came. Bob said later that he heard my arms crack, and in truth, that I held on was due to some mysterious dispensation while the boat got under way; then I slipped the wood crosswise under the seat, and Bob steered the flying dinghy with his oar.

Maddened by the sudden attack, the sawfish ran straight inshore, dragging the bow well down, making a menacing wave of foam ahead of us; then on nearing the beach, turned so suddenly that the dinghy partly filled, and sped away up the long white sandy beach, from which Long John waved his sombrero and cheered. There was nothing to do but to tire out the fish, so, after enjoying the run awhile, I put over a pair of oars and tried to stop it, forcing it to swim in a circle while we climbed to windward on the turns and displayed

our agility. The water was not over four feet deep, and the sawfish took us nearly around the key before it began to weaken ; then the dinghy, being now a third full of water, proved too much of a haul, and I took the line and in half an hour had the boat over the game.

The grains had struck just over the gills, where the neck ought to be, in a good place for towing, but as I tried to lift it, out came the big saw, and we dropped into the bottom of the dinghy while the toothed sabre struck the gunwale a slashing blow, breaking off several teeth. A cut from such a weapon would, Bob said, "leave a man full of holes," and the quickness with which the fish sent the weapon around to right and left was amazing. Three times it literally swept the deck, ramming its teeth into the soft cedar of the boat, breaking several, suggestive of the damage it might do. It was essentially a "down bridge" performance, and no jackies dodged shells quicker than did we drop, when that ivory-toothed saw-cleaver came whirling across the boat, while the sawfish, partly held by myself, seemed to stand on its tail. Bob finally caught the end of the line and literally lassooed it, and with a jerk hauled the saw down to the rail, placing the big fish *bors de combat*, as helpless as a turtle on its back.

The sawfish has certain claims on the angling fraternity as a game fish, at least by another name it is game ; but by some it is classed with the

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sharks, and looked upon as vermin. I have had as hard and gamy a play with the sawfish with a rod as some tarpon have given me, and the struggle this fish gave with the grains established its reputation, with me at least, as a gamy not to say dangerous animal.

In swordfish fishing, one is liable to be spitted, or charged, and a friend told me he was twice rammed by one he had hooked, and forced to cut away the line; but the sawfish is a shallow water swashbuckler,—he hacks you with a bludgeon filled with ivory nails. We made the fish fast by its saw, and towed it in, and when the other men came along, hauled it up,—a splendid specimen weighing at least five hundred pounds, a strange combination of ray and shark, with a four-foot sword, the sides armed with stout ivory teeth an inch in length, a savage and dangerous weapon.

The body of the sawfish is wide, the side or pectoral fins giving it the appearance of a ray, making it a conspicuous object against the bottom. The sawfish is in demand for a singular purpose. The big saw is mounted as a base for large thermometers, and the specimens I caught were sold by the men for this purpose to a little German in Key West who collected strange flotsam of the sea.

The sun was so hot that I determined to return to camp, and had hardly started down the beach,—Chief bearing the trophy and John his net and

mullets, — when I stumbled and fell, and found myself nearly waist deep in a big hogshead, having landed on a human skeleton, crushing in the jaw and lower part of the skull. The men professed complete ignorance, although they have been here twenty years. There was nothing about it to tell the story, no vestige of clothing, and the supposition was that some sailor, or some pirate of old perhaps, had died and been buried in the cask in default of a coffin. These islands, back in the forties or early fifties, were the resort of pirates and free-booters, the harbor affording an excellent retreat for vessels which, did they know the reef, could slip in through the narrow channels and easily throw an enemy off the track.

The heat on this and other keys at midday in the last part of June was sometimes unbearable, particularly in the brush. A thick nebulous caloric wave rose from the white sand and distorted every object. Masses of old timber, pieces of wreckage, man-of-war birds roosting, all took on gigantic shapes in this heat mirage. There was no getting to windward, as there was no wind, and the thing to do was to go in swimming every hour, five minutes in the sun being sufficient to dry my linen trousers and shirt, and create an appetite for another swim.

It was during one of these cooling-off swims that I tested the stinging powers of the Portuguese man-of-war (*Pbysalia*). These beautiful

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fairy ships were common everywhere; the shore was lined with their dried balloons, which exploded as I trod upon them, and the lagoon was the field of action for myriads. In swimming on my side, I ran over one, the mass of tentacles, which extended away about fifteen feet, covering my abdomen and legs with a purple, virulent mass. The impact came like an electric shock, and I had barely power to get to my feet and stagger inshore. I was told by Bob that I had had "a close call." The mass was cut or scraped off with a razor, then I was covered with sweet oil, and dosed with whiskey. Singularly enough, while the burning was excruciating, the most serious symptom was loss of breath; doubtless, the action of the heart was affected. For a year or more the flesh was covered with the fanciful markings, and I could have passed a creditable examination as the tattooed man. Some French naturalist has made a number of interesting experiments with the *Physalia*, killing dogs and cats by giving internal doses of the tentacles, proving the presence of a virulent poison. I am confident that if I had not had immediate common-sense treatment, I might not have recovered, and I doubt if, off bottom, I could have reached shore.

I was on the lookout for these animals when swimming, and saw this one, but did not suppose that its tentacles extended so far behind. In large individuals the train is sometimes fifty feet in

length. No more beautiful object than the *Physalia* can be imagined,—a floating bubble four inches long, with a perfect sail that can be elevated or depressed, while depending from its lower surface is a mass of vivid blue or purple zooids or tentacles, which can be held closely to the body or extended many feet. They constitute at once the drags, the keel of the fairy ship, and lures as well. I have often watched their action ; lowered into a school of sardines they resemble purple worms twisting about; a small fish bites at one, and, as though struck by lightning, turns over dead. It is instantaneous. Bob said, "The sardine never knew what hit him." The moment of contact tens of thousands of lasso cells, animate bombs, capsules loaded with "screws," exploded and struck the fish, piercing it, pouring into the myriad of wounds a purple poison that was as effective as so many electric bolts.

But this is not the strange part of it. I can imagine no more terrifying creature in the sea than this, a living torpedo made up of millions of tubes, death to small animals lurking in every one ; yet among them, swimming about freely, were from one to half a dozen little fishes (*Nomeus*) that had been endowed by nature with the exact color of the tentacles, a vivid purple. So perfect was the imitation that a "tenderfoot" would never have seen them. When I lifted the Portuguese man-o'-war by the sail, and held the mass of death-dealing

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darts above the water, the little purple fishes appeared, darting about, terrified at being deprived of their protector; upon releasing it, they immediately came back and resumed their position beneath it.

I have been told that the *Pbysalia* devours its attendants; but in hundreds examined, I never found a *Nomeus* in the toils, which of course does not prove that they are immune; but it does show that they know more about it than the sardines. When the *Pbysalia* is feeding, its fishing line is lowered many feet, and the moment a fish is caught, it is hauled in by short jerks, so that, in two or three minutes, a two-inch sardine will be hauled ten or twelve feet and surrounded by the tentacles. When the *Pbysalia* wishes to move, it elevates its beautiful pearl-colored sail, tinted with pink, which displays a wind surface of six or even seven square inches, and with its purple drags trailing behind to steady it, sails away over the Gulf with countless hordes of *Porpita* and *Velella*, and the purple snail *Ianthina*,— all mimic ships of the sea, of great delicacy and beauty.

CHAPTER V

IN THE WAKE OF A SAILFISH

The Swordfish as Game. Tame Pelicans. A Haunted Island. The Gray Snapper. Variety of Game. Flamin-goes. Robbers of the Sea. The Struggle for Existence.

LAST night I left camp at midnight and walked around the key alone, and I am confident that I know definitely what isolation means.

Deep in the heart of a forest, a stroller may walk out, if his sense of direction is well developed ; but on this green-capped coral key the isolation is complete. One may walk, but it is an interminable circle over endless sand that at night has a spectral whiteness, yet strange beauty. The low brush, green during the day, has now a purple hue, and the strange noises of the night come with a crisp distinctness that tells of nerves attuned to a high and acute pitch. The shapes of gold-laden galleons that have been wrecked here rise ; the wrecks that have pounded to pieces on the toothed reefs, and the spectral shapes of the sand and various objects stranded in long, irregular windrows, seem exaggerated, intensified in the peculiar phosphorescent light that is emitted by the sea that comes piling in on the windward side. The gulls

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are sleeping; only an occasional wanderer is abroad; its weird cry, intense and strident, bites the very air. As far as the eye can see, the shore line is a mass of ghostly light, while the pounding of the waves has a hollow, insistent, booming sound, which adds to the weirdness of the scene.

The previous night I had suggested that we take turns in patrolling the key in search of turtles; but Chief objected at once, and I found, to my astonishment, that none of my companions would walk around the island alone at night. They knew that we were absolutely isolated on the key, as we had tramped across the island from every point; yet Long John's excuse was that he "did n't know what he might meet." So I fell to wondering whether this was the lair of the sea serpent, or whether perhaps sirens basked on the golden sands at midnight; but I met none of them, and held to my walk around the north end, leaving the breaking sea behind. The wind was hot, the sand still threw out radiations of heat, and the sea was a blaze of phosphorescence, as I waded along the shallows.

Suddenly I heard a *pouff-pouff*, and stopped. A swirl of phosphorescence about thirty feet from the shore told the story of a turtle, and I stood motionless as it came slowly in. It stopped at the beach at least five minutes, then, deciding that I was a tree, came on; and a few seconds later I sprang upon it. Four or five times I raised it

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upon its side, and as many times it threw me off, with stinging blows ; but I finally toppled it over and went swinging down the beach, exultant.

Suddenly I made out a figure standing near the brush, then another ; then came the resonant voice of Bob, "Who's thar?" I did not reply, but kept on.

"Stop, or I'll blow a hole in you," came a tremulous voice ; and I stopped.

"Oh, it's you, boss," and the two men came down the beach.

"Who did you think it was ?" I asked.

"I'll be dogged if I knew," said Bob, and then I got the story.

"The last time I was over yere," said Bob, "we camped out where we are and divided up the turtle watch. Chief went out first, and had n't been gone long before back he came and sings out, 'You both there?' and we were. 'Well,' says he, — and he hadn't had a drop, — 'I followed a man half around the point; he kept about a hundred yards ahead of me.' We laughed ; but Chief said he would n't go out again without a gun, and we did n't have any. So John started, and in half an hour he came over the island the short cut and said he had met a man on the other side, face to face, but had lost him in the bush.

"Well, boss, we all started out together, and we found there was no doat there, and the next day we walked over every foot of the key and never

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found a thing or a sign of a soul, or the mark of a boat's keel ; so it's kind of onpleasant strollin' over the key alone. The place is haunted, that's a fac'."

" That's it," acquiesced Chief.

I made many trips around the key at night, but never met the stranger, though I hunted for him. I have always had poor luck in these matters. I have angled for ghosts, but never landed one.

When we came over, John brought two tame pelicans he had raised from infancy,— long-billed, asthmatic, wheezy creatures of bilious mien. They sat on the deck of the Bull Pup, deep in thought when not eating or fishing, and went with us on the daily fishing trips, either alighting on the boat or swimming near us, wheezing for food, which we tossed them. One morning I found Bob fastening a leather collar about the necks of the birds. This accomplished, he drove them from the sands into the water, where they began to fish. They would rise and fly along twenty feet or so above the surface, and then sighting a school of sardines, turn and plunge downward, head first, with great velocity, opening the large mouth at the impact and endeavoring to fill the net-like pouch. So light is the pelican that it immediately assumes the perpendicular, and whether successful or not, invariably wags its short tail in a congratulatory manner and tosses its beak in air preparatory to swallowing the game, which it often misses.

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The tame pelicans did this, but they could not swallow, on account of the strap, so gave it up and came ashore, where Bob took the fish. I found I was mistaken in laying this act to laziness on the part of my boatmen, all of which illustrated the fact that circumstantial evidence is not always to be relied upon. Bob merely used the pelicans to catch some special gray snapper bait that was beyond the reach of his cast-net, and the result of an hour's fishing with the birds was two or three dozen little fishes which he called hardheads. The Chinese employ cormorants in a similar manner.

We pulled out this hot day to some coral heads on the edge of the channel, and I tried the gray snapper, which, to my mind, when it can be had at its best, is far ahead of the black bass. The two fishes look very much alike, but the snapper is the cleanest cut, the gamiest, and on a light rod — and by light, I mean a heavy black bass rod — is a fish “to conjure with,” and a twenty-five pound gray snapper, a few of which I have taken on various parts of the reef, affords sport of a rare quality. They are usually murdered with big cotton lines, and the fine play of the fish is lost, the sport brutalized. The young on a trout rod afford all the pleasure of this sport, and I was never tired of stocking our well with these radiant-eyed fishes.

On this delectable morning I had caught everything on the piscatorial bill of fare, yellowtail, hogfish, porgy, grunts, and I finally hooked a snapper

with a bunch of hardheads. In a second it had unreeled one hundred feet of line, and from a short sulk came bounding upward to turn at the surface and make the circuit of the dinghy at the top of its speed, playing me, if I confess the truth, not I him, twenty minutes, and then—well, I purposely broke the line. We did not need it, and to see Chief gaff so beautiful and so gamy a creature was not on my programme. Of all fishes, the gray snapper has—at least to me—the most attractive “face.” Its eyes are beautiful, the antipodes of those of the sardines or the tarpon, black and white marbles which glare at you, fixed and immovable, with hypnotic stare; but the eye of the snapper in the water is a gem, radiant with colors, which give to this fish an expression, at least to my mind, not found in other fishes.

While I was pretending to mourn the loss of my big snapper, Long John turned and whispered, “Look yonder, boss!” I followed the direction of his long, bony finger and saw what appeared to be a miniature sail moving slowly along. I knew it at once, though I had never seen the sailfish alive. With a word to Bob, we had the coral hook up and I was standing in the bow, grains in hand, while Long John steered the dinghy after the fish. It presented a singular and attractive appearance; was possibly seven feet in length, its sail-like dorsal and the upper lobe of its tail protruding high above the water. The dorsal fin was an enormous

affair, nearly as long as the fish, seemingly four feet in height and deeply notched, resembling a huge ribbed fan ; and as the sun played upon it, it seemed to glisten and scintillate with many hues. The big fin had a peculiar motion like a fan about to shut up, quivering and trembling. It was moving very slowly, the tail fin working like a screw and wafting it along, a fanciful ship on this glass-like sea, yet the incarnation of power and viciousness, as I soon knew full well. Long John was swearing to himself; he did not approve the game; but Chief was all excitement; his veins were under pressure all the time with sporting blood; there was no game too fierce, too dangerous, no chances too great for him. Nearer we crept, and presently I could see the dome-like head of the swordsman, its back looking green against the blue; then the short, dagger-like sword; and then I tossed the grains, and into the air literally burst the splendid fish, flinging itself from side to side, giving slashing blows to right and left like the swordsman it was. Long John backed the dinghy with a rush, and for a few seconds the fish seemed to go mad, flinging its tail out of water, rolling over and over in a flurry of rage, then suddenly darting away like an arrow from a bow.

I had about fifty feet of line on the grains,—sufficient for turtles, but not for game of this kind,—so Chief had made fast another rope, and this to the painter, none too soon, as the line was

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jerked out of the dinghy in a marvelous fashion, keeping us jumping to avoid it. The end came quickly, the dinghy being hauled ahead with a force that nearly sent me overboard. Out into the channel we went, back to the reef again, surging on, the fish now dashing into the air, rushing to and fro in a suggestive manner, as though hunting for the cause of all the trouble, leaping and plunging, to follow with a rush that carried us half around the island ; then, striking a steady pace, the swordfish headed out to sea. We then took the line, passed it aft, and "laid on." How many times I had hauled on big game in this way !— exciting sport, strenuous endeavor, hard work ; but here was a game that had it in its power to spit us again and again, to run us through, and Long John was not backward in expressing his opinion, ominously.

"Boss, I 'm dogged if I like this yer so'dfishin' ; he 's a reg'lar *volador* ; maybe he 's a man-killer, an' Lord ! how he 's a-pullin' !"

At this particular moment the swordfish was rushing around in a circle about two hundred feet distant, hauling our little dinghy around and over in a manner not particularly pleasant, though Chief had an oar out astern, and was trying to keep her bow to the fish. The swordfish made a complete circle of the boat, and Long John, who was a pessimist, swore softly to emphasize his view that the fish was hunting for us. So we laid on,

the men, joining in a quaint chant, "Blow the man down!" as we ran the dinghy up nearer, coiling the slack as we earned it. "Aye-ho! Blow the man down!"

The fish continually took us offshore, and here made a fine leap into the air, shaking itself and falling with a crash, to make off in a new direction. Nearer we came.

"*Blow the man down!*!"

We were within thirty feet of the fish, which was bearing down while we laid back and held the dinghy to it until it seemed as though she would go under; then "All together!" and she shot ahead. "Once more, lads," and the boat cut the foaming water directly over the fish, and with a rush we had it alongside, beating the water, striking from left to right, rolling over and over, until Chief lassoed the spear, caught it, and held on while Long John sent his sharp knife into the white throat and ended the game. Then we pulled for the key, towing the big fish that soon baited up two or three sharks, which followed up the trail of blood like hounds, only to be beaten off by blows and splashing of the oar. In a short time we had reached the sand and had our fish high on the beach,—a splendid specimen of the American sailfish (*Istiophorus*). We had no facilities for securing the skin and tail fin, much to our regret, so cured the head and sword, which made an excellent trophy.

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There is a great deal of mystery about the breeding of this swordfish. I frequented this isolated section of the reef winter and summer for five years, and saw many sailfishes, but never caught the young, nor did I ever meet any one who had, and where the fishes spawn, or where they go, is, at least to me, unknown. Our catch was over eight feet in length, with a remarkable tail, large and powerful, telling the story of its powerful leaps and how they were made. Chief said there was another — *Aguja de casta*, he called it — that was very rare, but much dreaded. I did not see this great fish, though I hunted for it in deep and shallow water; nor did I succeed in hooking a third and common species, *Tetrapurus imperator*, though more than once we put the grains into specimens and raced with them over the smooth waters of a deep lagoon to the south.

There is a great difference in swordfishes. *Xiphias*, of the North Atlantic, is a large and powerful fish, and the records show it to be a dangerous foe, many ships and boats having been injured by it; but it will not take bait even when served in the most inviting fashion, and can only be harpooned. The spearfish not only takes the bait, but is a fine game fish, playing like a tiger and hurling itself into the air continually, though its leap, which I have often watched, is a clumsy affair, a spring upward not unlike that of the tarpon, a wild, hysterical bound of rage, fear, or savage in-

tent; yet, unable to turn, the fish falls back bodily upon its belly with a loud crash.

That night after dinner, while stretched on the hot sands watching the clouds change to pink from vermillion, scarlet, and other tints that Turner reveled in, John related a weird yarn of his luck with the sloop San Rosalie which explained his lack of enthusiasm when swordfish was the game.

"We were fishin' for red snapper," he said, "on the bank to the south'ard one summer, in the Havana trade. When we filled the well we jest ran over yander and sold the goods and was back the next day. I reckon we must have rammed into a big so'dfish,—they have a way of leapin' on the surface. I was settin' on the rail, fishin', and the smack was hauled up into the wind, driftin', but hardly movin', when I see what I thought was a shark fin comin' along cuttin' through the water like a knife. I yelled to the conchs to look, and then I see a long, narrer fish like a torpedo,—I'll swear it was twenty feet long,—then it hit us under the port bow, *biff!* You may not believe it, boss, but that hooker of a smack was head down by the time we got the dinghy overboard, and in twenty minutes she was full, only the air in the well kept her afloat. We got her into shallow water after a six-hour tow with the two boats, and at e'ob tide we got at the hole. The fish had struck the head of a rotten knee that had given way, and left a hole in her as big as a man's head."

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"When we were gettin' her under way," continued Long John, who was lying flat on the sands, his red face supported by his long arms, "I saw something thrashin' the water, and it turned out to be the so'dfish; so we took a turn out of him jest for luck. He was swimmin' in a circle, and fightin' mad, but I put the grains into him and made him fast and towed most of him in. The sharks got a share, and when we got him on the beach we found the so'd was broken off, so that his whole doggone head was splintered. The fish was twelve foot long and must have weighed fifteen hundred pounds; but we did n't weigh him. I never see another like him, and never want to, as when we got the bow of the smack out of water, there was about eight inches of the so'd rammed into one of the smack's knees; it was in so tight that we jest cut it off."

This dangerous fish must have been the rare *Tetrapurus amplus*, found south of Cuba, of large size.

At daybreak I found the men asleep on the sands that were still warm; they had overlooked the formality of turning in. As I stole down to the beach to reach the warm bath, always ready with its clear sandy bottom, the spit was covered with birds. A flock of flamingoes stood like statues, white and red; roseate spoonbills plumed themselves with spatula-like bills; gray pelicans,

laughing-gulls, and on a bush hard by a flock of man-of-war birds, by all odds the most graceful fliers of bird creation.

I swam down shore near them. Doubtless they thought me some strange kind of turtle; but as the sun came up out of a bank of vermillion clouds they all went to sea, and as I lay on the beach there began one of those conflicts illustrating how the other half lives. A laughing-gull had alighted on the head of John's pelican just as the latter was about to swallow a fish it had caught, and leaning over snatched it from its mouth to rise aloft with exultant cries, at which a man-of-war bird unlimbered and flew after it; then followed one of the most remarkable contests I have ever witnessed. For twenty minutes the man-of-war bird chased the gull up and down, in and out, dashing at it fiercely, the two constantly rising until they seemed to be lost in the empyrean. There, high above the sea, the gull was plundered; it dropped the fish it had filched from the pelican, which fell like a plummet, while the black, red-pouched, musky man-of-war bird followed with the downward rush of a meteor, overtook the falling fish, rose beneath it, caught it deftly in the air, and slowly flew to its perch in the bay cedars to enjoy the thrice-stolen game.

I watched this bold robbery many times, but never knew the pelican to resist or protest when the gull sat on its head or back; nor did I ever

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see a man-of-war bird fish for itself; though possibly it does, but not when it can filch from the laughing-gull, the pelican-robber, which in turn kidnaps the fishes of the sea.

CHAPTER VI

GRAINING THE DEVIL FISH

A Hard Chase. The Sport of Sports. Surrounded by Water-spouts. A Narrow Escape. A Curious Shark.

ONE of the most interesting diversions in fishing on the reef was watching the ways and habits of the various fishes. The clear sandy bottom of the reef off Middle Key was the feeding ground of various rays called stingarees, whiparees, and other names suggested by the long, slender whip, or lash, with which they were armed. They appeared like birds as they moved along the white bottom, their black shapes silhouetted against it, the side, wing-like fins moving up and down. One, spotted like a leopard, was famous for its leaps, clearing the water four or more feet, falling prone with a loud, resonant crash. Several times I hooked one of these rays with a fairly light line on my rod, and it dragged me up and down the beach, and always carried away the line when it made an off-shore run. Then I sometimes grained them, and they towed the dinghy about for a long time, proving a gamy fish. I secured the "brush" of one, and just above it were three sharp serrated spines, — weapons to be dreaded, as I found later, when a

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companion was struck by one, the blow nearly severing certain tendons of the foot.

Especially in the evening, the leaps of the rays could be heard and seen. I believe they were partly in play and partly to escape from sharks, as at night the shallow reef was the feeding ground for a vast horde of fishes that came up at this time out of the adjacent channels to feed. Fishes never seen at other times now disported in the shallows; and the waters were churned into vivid phosphorescence by this hungry throng. Even the crayfishes left their nests beneath the coral and ranged over the seaweed-covered flats, in such numbers that I could have filled my boat by using the grains half an hour before sunrise almost any morning.

One morning, when the heat was ranging up into high thermometric latitudes, I lay on the sands beneath a sail awning Chief had rigged up, when, directly opposite, a ray, which must have been nearly twenty feet across and quite as long, sprang into the air. It was a marvelous spectacle, and suggested the restorations of the giant *Pteranodon* of early days. When it struck the water, it shot away with the tops of its wings projecting out of it, and then we saw half a dozen on the surface, which appeared to be swimming in a circle. Chief said they were playing, and, it being an opportunity that evidently would not occur every day, I decided to try to take one. All the men

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advised against it, having had various experiences, while John declared that one towed a three-masted schooner out of Garden Key harbor, and so demoralized the crew that they jumped overboard and left her, preferring to risk the sharks in a swim ashore, to the devil fish.

All this had its natural effect, and made me more desirous of taking a ray. There was a very light breeze, and we hoisted the mainsail of the sloop, while I rigged up a lean-to on the bowsprit, and made my grains fast to all the available rope, mustering about three hundred feet; then, all being ready, I took my place in the bow, in the fashion of swordfish harpooners, and told Chief to steer for the rays that had moved down the beach a way, and were still swimming in a circle.

As we crept up under the gentle sculling movement of Chief's oar, the wind failing in the lee, we saw, for a moment, unobserved, the great game of the devil fish, as game it must have been. They were swimming one behind the other at intervals of ten or twenty feet; the sloop lost headway, drifting near enough to the outer edge of the magic circle for us to see every movement. Their motion was a most graceful lifting of the side or pectoral fins, a virtual flight in the water; but most wonderful was the series of evolutions these submarine fishes went through. Suddenly one would turn a complete somersault, showing its pure white under surface like a flash, assuming

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the original position without losing its headway; or another would make a swooping plunge down to the sandy bottom, and rise with a rebound that made the water boil like the surface of a steaming caldron. Again I saw the devil fish tilt to one side with a peculiar motion, displaying a flash of black and white, to fall into line in this strange swinging around the circle. I could have watched the scene for hours, but we were drifting nearer and nearer, so, selecting a ray that tipped its back invitingly toward me, I hurled the grains into it.

None of us were quite prepared for what followed, as the gigantic fish rose from the water as though blown up from below, and appeared like a huge bird flapping its wings, and swinging its whip-like tail. But this was only for a second; it fell with a crash that sent a wave seething back over the bow of the Bull Pup, and dashed away, tearing the rope from the coil in an ominous fashion. There was nothing to do but wait until the end came; a few seconds, then the line came taut with a thud, and the old sloop plunged her sturdy bow into the sea. The ray towed us over the reef and showed us what would have happened, assuming that we had used the small boat. I believe that it could have been hauled under water with a short line; as it was, when the fish reached deeper water it hauled the bow of the blunt-bowed sloop down ominously near the deck line, and its course took us directly across the end of Sand Key and into

shallow water. But the devil fish was too demoralized to hunt deep water or to pick out any particular trail over which to escape. It swam across country at the top of its speed, and, as the tide happened to be low, it dashed or slid upon a ragged branch coral patch, a deadly *cheval-de-frise*, and with back exposed, beat and pounded the water like some huge and uncanny dragon, trying to fly, yet unable to rise.

The dinghy was towing behind the sloop, so, tossing in a lance with which Long John speared conchs, I jumped aboard and Chief pulled me to the scene of the wreck, as wreck it was, and no more extraordinary spectacle was ever witnessed than this gigantic bat-like creature pounding the sea, beating it with resonant blows and tossing the spray and spume in air, rolling from side to side in its efforts to escape, which only served to push it further on to the sharp branch coral. I hesitated to strike so helpless a prey, but as it was evidently a question of putting the animal out of its misery, we ran behind, and I sent the lance into it several times. Up in great convulsive folds the animal rose, presenting an appalling spectacle, altogether uncanny and menacing; its extraordinary mouth organs, or feelers, adding to the horror that it might well inspire in some. For fifteen minutes it struggled and fought against the inevitable, after being lanced repeatedly, then gave up, and hung inert in the foot or more of water that covered this natural

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trap. The tide was still falling, and in an hour the great fish was high and dry, and we went ashore and waited until the flood, when we floated it off and hauled it on to the beach, making it fast to the brush by a rope. At the next low tide in the morning the devil fish was spread out for inspection.

It has been my good fortune to take nearly all the large sea game of American waters, but this fish was the climax in size, fighting qualities, and extreme ugliness; and though I later took one in a more sportsmanlike manner, following it in a dinghy, the tow we had in the sloop was quite strenuous enough for average nerves.

The ray attains an enormous size, and some facts about it may be of interest. Specimens twenty-five feet across have been reported, while one killed on the Bahamas required ten yoke of oxen to haul it up on the beach. Here is a game that requires no game laws to protect it. No sentiment need be wasted upon the black vampire, another of its names (*Manta brevirostris*), which, given fair play, will tow the sportsman and give him literally the contest of his life. There are few more interesting fishes in the sea, and considering its size, it is very rarely seen. Scientifically it belongs to the family *Mantidae*, of which there are several species, found in various parts of the world. In appearance they are bird-like in a conventional sense, the side fins extending out to points, being wing-like in shape, and in the largest specimens

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measuring thirty feet from tip to tip across the back. The teeth are small, flat or tubercular, often absent in the upper jaw. The eyes of the ray are placed laterally and are large. Trailing behind this bird-like creature is a long rat or whip-like tail with a small dorsal fin surmounting its base. The *Manta* is ovoviparous, and in the breeding season is found more or less at the surface. In swimming at the surface the rays have a singular habit of pitching over or turning a somersault, a feat I have observed ravens perform in sport. There are two genera of these fishes, *Manta* and *Aodon*, and seven or eight species, doubtless found in tropical and semitropical seas all over the world. In the Atlantic they range north to the coast of Maryland and New Jersey, possibly straying farther north; and on the Pacific have been seen at Santa Catalina and are fairly common at San Diego and to the south, in the Gulf of California being dreaded by the pearl divers of La Paz, who call them blanket fishes. In my experience the *Manta* is a harmless creature that would under no circumstances attack a fisherman, and is demoralized when struck, making no intelligent effort at retaliation.

In the one known as *Aodon* the singular cephalic fin or clasper on each side is "developed as a straight horn-like appendage pointing forward." In the *Manta* the cephalic fins are long, turned forward and inward. Five species are known of

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Aodon and two of *Manta*; and it can be said with certainty that it is the largest of all fishes. *Aodon* was first described by Lacépède in 1798, while *Manta* appears to have been described by Walbaum as *Raia birostris* in 1792, and many old works contain references to it. One of the early accounts of the *Manta* is found in the annals of the Lyceum of Natural History of New York. The crew of a fishing-boat were two weeks finding and capturing the monster and bringing him to shore. The account is as follows :—

“ Dr. Mitchell gives the following account of a gigantic fish of the ray kind, which he calls the oceanic vampire. It had been taken in the Atlantic Ocean, near the entrance of Delaware Bay, by the crew of a smack. They heard that creatures of extraordinary form and size were frequent in the tract situated off Capes May and Henlopen, during the warm season ; and accordingly equipped themselves for the purpose of catching one or more of them. After an absence of about three weeks the adventurers returned with an animal of singular figure and large magnitude, which they had killed after a long and hazardous encounter. The weight was so considerable that after it had been towed to the shore, three pairs of oxen, aided by a horse and twenty-two men, could not drag it to the dry land. By estimation it was supposed to weigh between four and five tons. The length from the margin of the head to the root of the tail

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was 10 feet 9 inches; length of tail, 4 feet 8 inches; length of fins projecting forward from the corners of the mouth, 2 feet 6 inches; making the whole length from the tip of the head-fin to the tip of the tail 17 feet and 3 inches. The breadth from the extremity of one pectoral fin or wing up to the other, measuring along the line of the belly, was 16 feet; when measured over the convexity of the back, 18 feet. On each side of the mouth there was a vertical fin 2 feet 6 inches long, 12 inches deep, and $2\frac{1}{2}$ inches thick in the middle, where it tapered toward the edges, which were fringed in front with a radiated margin. The fin, or organ so constituted, could, from its flexibility, bend in all directions and be made in many respects to perform the function of a hand, so as, by twisting around, to seize an object and hold it fast. The wings, flaps, or pectoral fins were of very curious organization. There was a scapula, humerus, ulna, carpus, and an uncommon number of phalanges, of a cartilaginous structure; all these joints were articulated with each other, but the articulations, like those of the human sternum, had very little motion. It had more analogy to the wing of a bird than anything else, and yet was so different from it as to manifest a remarkable variety of mechanism, in organs intended for substantially the same use. Fish of the kind now under consideration may be aptly denominated submarine birds, for they really fly through the water as

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birds fly through the air. Fishes of this organization perform their flights by flapping the wings after the manner of hawks, crows, and eagles in their progress."

While not very common on the extreme outer Florida reef, the *Manta* is not uncommon on both sides of Florida, and is often seen on the Gulf coast. At Lemon Bay, San Carlos Bay, Charlotte Harbor, and Tampa the big ray will nearly always be found. One of the most recent captures in this vicinity was made by Mr. E. H. Tomlinson of St. Petersburg, Florida, to whom I am indebted for some interesting photographs.

With a view to the capture of a large specimen, with a fair degree of comfort, Mr. Tomlinson built a catamaran especially for the purpose. It was a schooner, rigged with a house and cockpit and a lean-to or pulpit on the bowsprit, after the fashion of the Cape Cod swordfish fisherman. The spear was a lily iron with a heavy pine handle provided with a long hemp rope. With this rig and some skilled fishermen, Mr. Tomlinson started for the big game, which was shortly sighted coming up the channel, the big fins out of water attracting immediate attention. Mr. Tomlinson took the harpoon, and when the bow of the catamaran was nearly over the ray he harpooned it. There were two rays, and, singularly enough, the uninjured one leaped completely from the water, and the other began a struggle that can only be appreciated

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by those who have taken this huge fish. It towed them many miles to sea, up and down the coast, and was captured after a long and arduous contest, finally succumbing after another harpoon was hurled into it. I commend the big ray to the sportsman who yearns for new fields to conquer and who is satisfied only with ultra-laborious sport.

Few fishes have the faculty of conveying fear and terror like this huge sea bat, dreaded and hated by all seafarers; and as specimens thirty feet across have been seen, there is good reason for assuming that such a fish is to be feared and avoided, unless one has a craving for sport of the most sensational nature.

The weather was so trying and the heat so pitiless that I sailed over to Sand Key, the third key to the west from East Key, to find the same conditions,— sand, brush, cactus, no gulls, and graves tunneled by crabs. Chief pointed to a spot on the horizon as Northwest Key, the smallest of the group. After noon a wind came up, and we started for Middle Key, making a reach out into the main channel. When about in the middle, I saw a black squall cloud, about the size of a man's head, rising over the edge of the world to the north. It came on with remarkable speed, and in twenty minutes the sky was overcast and the sun shut out by a curious copper-hued cloud of ominous appearance and import.

We stood by, ready to lower the sail, but in-

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stead of wind, there came a series of waterspouts. First a small, pendulous finger appeared, dropping from a lead-colored cloud not far distant. Down it fell, growing larger and larger until halfway to the ocean, when a responding tip was seen reaching up to meet it. The two soon joined. The spout had begun in the heavens, a whirling column of cloud that extended downward, the wind preceding the cloud body, reaching the sea and whirling it about with such inconceivable velocity that it quickly took the shape of a solid pillar of water that appeared to be literally supporting the sky. Almost before it was complete, another and another formed on all sides, and in a short time we were surrounded by five of the tallest waterspouts it was ever my privilege to look upon, and I have seen many.

No more appalling and impressive spectacle can be imagined than this. How high they were it was impossible to conjecture ; they *appeared* a mile in height,—at least, that would have been the guess of a cool, disinterested spectator from a safe position, but they may have been but five hundred feet, more or less. As soon as they were complete, they bent before the breeze, which now came up, and began to move to the east. I do not know what were the sensations of my companions ; I kept my own to myself, but Chief expressed his opinion that if we had let the devil fish alone he would, at this precise time, have been eating fried

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grunt on Middle Key, instead of looking at his own funeral. It was a modern miracle that we escaped all these swaying giants. Long John and Bob got the dinghy ahead, made fast the line, and stood ready to try and tow the Bull Pup out of range at the psychological moment ; but Chief kicked off his heavy shoes, lighted his pipe, and doubtless made other preparations for immediate and violent dissolution. But he was disappointed ; the spouts went careening by us, so near that I had to bend my head far back to see the top of the nearest, and passed on, like stalking giants, with ominous roar and a mass of foam at the base, the middle bent like a bow, the top lost in the coppery vault of the heavens.

What would have been the result of a collision with one of these giants it was easy to conjecture. The Bull Pup would have been twisted and torn into fragments, and her parts tossed high into the air by the whirling waters. I have been within thirty feet of a large waterspout, raced with it, near enough to be drenched by its spray, deafened by its roar, and feel competent to express an opinion ; yet I saw a large schooner struck by one and come out of the collision with little or no damage. I believe that this was an exception, as the vessel was hauled on the reef at the time the spout struck it.

With the passing of the waterspouts came the wind, fresh and sparkling ; the air was clear, the

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sun shone again on the blue waters, the spouts were a blur on the horizon and had doubtless gone to pieces, while we were bearing away under press of sail for Middle Key.

I had always been skeptical as to the ferocity of sharks; but on this afternoon, when the sun was getting low, I was driven in from the reef by a large shark that persistently followed us. I was trying to catch some mullets with a cast-net, and had waded out into the water waist deep when I saw the fin of a large shark. I was partly dragging the net in the water, and had left a trail of mullet on the smooth surface, a scent which the wandering shark readily picked up; and his peculiar motion in coming on rapidly, beating like a boat in short tacks from side to side, was so suggestive that I turned inshore, then, reaching the shallows, pelted the brutish fish with dead coral rock, but did not succeed in driving it off. It swam in until it grounded, then thrashed the water into foam in its attempts to escape, while I ran alongside. It was over eight feet long, and bulky enough to have played havoc with a swimmer; yet I still had my doubts as to whether it would have attacked me. It is my opinion that the average shark is a coward, but I also think there are certain sharks which — like tigers and elephants — are man-killers and eaters. I have known such sharks, and doubtless the hot tropical waters aid in debasing their appetites.

CHAPTER VII

TAKING AN OCEAN HURDLE

The Yellow Moray. A Regular Sea Serpent. Chased over-board. Coral Reefs. Collecting and Curing Corals.
An Old Gun. A Black Squall. Outwitting the Barracuda.

THE conventional idea of a coral reef and the reef itself are two different things. Not one person in ten thousand has seen a living coral reef, and the white bleached coral that is found in the shops of every northern town passes as coral ; but this is dead, is the skeleton. Again, the coral is supposed to be made by an "insect." Montgomery, the poet, long ago described the "coral insect" as working "ceaselessly," and all the labors of zoölogists and text-book writers will doubtless be unable to overcome this amiable indiscretion.

The coral animal is a polyp, a sea-anemone-like creature that takes lime from the water, secretes it in and about itself, building up a little cell upon which others grow or bud, as the branch corals. In the brain corals the polyps lie in grooves, and the community takes the form of a gigantic coral head, as in star corals (*Astrea*) ; or there may be one large polyp a foot long, as *Fungia*.

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Nearly all reef corals alive are olive-colored or light or dark brown, *Astrangia*, a northern coral, being the only white variety; and the great masses here covered miles of reef. The common variety is the branch coral, which covers the reef in great plantations, and is cut into streets and pathways in every direction. This coral rises from one to two feet in shallow water; but on the edges of the cañon-like channel, a turquoise-tinted artery winding in and out, the branches extend three feet or more, and resemble the antlers of the elk. The food conditions are doubtless better in this locality. The delights in drifting over this garden of the sea cannot be adequately described. The wealth of color, appealing to even a dormant sense of the beautiful,—the mauve of the lagoon floor, the deep browns and umbers of the coral trees and groves, the greens in alga patches, the yellow and black whips of crayfishes which wave under every branch, the splendid masses of vivid blues, yellows, and greens from hordes of resplendent fishes that poise against the coral, the intense labradorite blue of the channel, the splendor of the vermillion clouds in which the sun rises and sets, the splashes of pearl and royal purple on the surface in *Iantbina* and others, and over all the mysterious vertiginous haze of the heat rays, distorting, melting, confusing objects near and far, all appeal to the lover of nature and the beautiful in living things.

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The great lagoons and forests of coral are the homes of myriads of creatures, and a diversion of which I never wearied was drifting over the surface, grains in hand, or wading along in search of shells or rare corals. Each coral branch was the home of myriads of animals, particularly the beautiful micramock, a spotted *Cypraea*, the common shell seen on mantel and table in the country from Maine to Alaska.

These shells live in the branch coral, where I often had to break the points to secure them, and here the secret of how they preserve their wonderful polish is seen. There appears to the eye sometimes a black, soft, egg-shaped mass, and when picked up it is found to be the beautiful shell, the animal or owner of which has thrown out a delicate covering entirely concealing and protecting it from the slightest injury. I spent a portion of each day with Chief, John, or Bob wading and towing the dinghy, stopping to lift a twenty or thirty pound mass of coral and place it on the little deck, from which scores of strange animals would drop and scurry away to be caught. Among the corals the so-called brain corals were the most attractive from their size. Some, on the edge of the channel, I estimated were four feet high and six or seven feet across, like old oaks blasted and riven. They were hollowed out, forming enormous vases in which were poised gorgeous angel fishes, parrot fishes, and many more.

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One hot morning I was poling along when I came upon a plantation of heads scattered for one hundred feet along the edge of the deep channel. From beneath each protruded a fringe of crayfish whips, big fellows weighing possibly ten or fifteen pounds, while the interiors were veritable aquaria. In one I noticed a peculiar black, pointed head, and having a hazy, indefinite notion as to what it was, put the grains into it, to have the spear as promptly jerked out of my hands. Grasping the cord, I found I had struck a moray that, so far as strength was concerned, was a young sea serpent; but I finally got it to the surface, and, stepping on to the rail, slid it in, partly by its own volition.

I believe I never was more surprised, as this fish proved to be a giant, with a mouth and fangs like a boa constrictor, which it opened as it dashed at Bob, who was sculling. He struck a mighty blow at it with the oar, but missing turned and sprang overboard into water about up to his waist. I jerked the monster back by the cord, when it turned on me, and being unarmed, and discretion being the better part of valor, I did the next best thing, and sprang up the mast of the dinghy, to which was lashed a spritsail. I succeeded in getting my bare feet out of range of this sea serpent, when the dinghy promptly capsized, my weight hauling her over, where she filled, and the moray wriggled overboard. Fortunately I had kept the end of the grains' cord, and we made

it fast to the painter and hauled dinghy and sea serpent ashore. The latter was over eight feet in length, its body as large around as my thigh, as near a sea serpent as one could imagine. No fish in the sea presents so ferocious and ugly an appearance as this, and while its bite is not strictly poisonous, it is dangerous. A moray's teeth are sharp fangs which cut and lacerate, tear and bite, like those of a dog. I had no apologies to make for my retreat, Bob having set the example, and I found all the men held the moray as a dangerous fish. We hauled the ugly creature upon the sands, where it coiled and darted at any object presented, like a snake; John skinned it, and I must say that broiled moray is an excellent dish ; then there was a barbaric satisfaction in eating an enemy. In some localities it was impossible to fish on account of the number of morays which came up ready to attack anything or anybody, and when we felt something coming in like a rock we generally looked over, and if it was a seeming coil of snakes cut it away.

I decided to make a collection of corals, so a survey was made of the reef, and we selected the most symmetrical pieces we could find. Many I dived for, and some few leaf corals on the edge of the channel it was necessary to pry off with a bar. These we placed on the beach in the sun until they were dead, then when decomposition had taken place they were rinsed in water until the dead ani-

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mal matter was all removed, this operation being repeated several times for a week, when the specimens were placed in the hot sun, where they soon bleached a pure white.

Some of the "heads" I found must have weighed several tons, and these it was impossible to remove. Each coral had a habitat and environment peculiarly its own. One which we called rose coral, a *Caryophyllia*, I found only in deep water and got by diving. Others grew among weeds in the shallows, some on the side of the channel. But the most remarkable growth was found in the hull of an old ship. How long ago this vessel had been wrecked no one knew. She was built like a frigate of the old class, and evidently had been driven in by a southeast hurricane, carried far over into the lagoon, and dropped in the branch-coral plantation. At very low tide I could just wade around her. Her hull was a mass of teredo shells, nearly all the woodwork having disappeared; but where the hold had been rose the most luxuriant growth of branch coral I had ever seen, calling to mind weeds or plants that always grow rank and tall in the shade. The entire hull had doubtless been filled with coral; the old ship's cargo was now alive.

About an eighth of a mile from here, in poling over the reef I noticed in about ten feet of water a long, narrow outline, and diving down found that it was a cannon. By successive dives I scraped

the sand and mud away and disclosed its entire length, later hoisting it up. This was accomplished by continuous diving. We remained down as long as possible and dug out the sand beneath it, finally passing a rope under the gun. A flat boat was then brought out, a derrick rigged, and we took ashore an old Spanish gun of the seventeenth century, bearing the arms of Spain, still plainly to be seen. How so large a gun had gotten into such shallow water was something of a mystery, but it was possibly a gun of the old ship, which the crew may have tried to land on Bird Key and failed.

To lie on the sloping deck of the old vessel and look, unsuspected, into this living cargo was one of the delights of the reef, as here could be found nearly every fish of the region. Near here the floor of the lagoon, in five feet of water, abounded in conchs, and long, worm-like *Holothuria*,—the trepangs of the Chinese, that are caught and dried off the Malay peninsula and shipped to China, where they are eaten. To impale one on the grains meant an hour's work to take it off, so tough were these creatures, and I often wondered what portion the Chinese eat, and how much beating and boiling is required.

The "tenderfoot" wonders how the so-called Conchs eat the shell conch, the animal being as tough as rubber; but the secret is to pound it with a club or rock and break the tissue, then conch is possible. This is the secret of cooking abalone.

These are the “gulfs enchanted,” yet life is not always a South Sea idyl. Yesterday Bob and I went out into deep water after kingfish, where we had the sport of kings, trolling up and down the long, fringing reef that made music in its roar. There had been a storm to the eastward somewhere for several days, reaching us as a heavy swell, that piled in upon the long line of dead coral rock, making this a dangerous *cheval-de-frise* for its full length. We went out through the main channel, kept away to the south, and had made a good catch when Bob pointed out a black spot to the east. It did not look larger than a closed hand, but grew under my gaze like a living thing, becoming wider and higher. It was a black squall, and had already “killed the wind,” our sail hanging motionless.

Bob looked around a moment, then expressed the opinion that we were “in a hole.” It was impossible to reach the channel to get into the lagoon, and the line of surf foaming and roaring before us looked like the worst hurdle I had ever faced on sea or land. Bob quickly decided it; he took down the sprit, and forming a leg-o’-mutton out of our big sail, made everything fast in the dinghy, then kicked off his shoes,—a suggestive initiative which I followed.

“There’s a chance of our getting over, boss,” he said, “but I reckon in the wind that’s coming we’re liable to miss it; but if she misses and goes

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over, jes' keep right on through the surf. There's so many doggone sharks here that it's onpleasant to fool around."

Briefly, Bob was going to try to jump the mass of foam,—take the ocean hurdle,—and I learned afterward that there was a small "five-foot channel" pilots used in calm weather through which a dinghy could, by a special dispensation, pass. By this time the sea and sky looked as though the end of the world had come. The clouds were copper-colored, a deep, ominous red, the water a disk of steel, the whole heavens presenting a weird and gruesome appearance. I have never seen a change come on so rapidly. It was appalling, and I threw off my coat, tied the sleeves around the seat; and as Bob took the oar to steer, I grasped the sheet in very light swimming costume. Out from the red mass came a long, attenuated finger of pearly cloud, apparently not two hundred feet from the water, and beneath it the glassy sea was now cut in every direction by currents of wind like gashes of a knife, and dark cat's-paws, and far behind I could see a wall of spectral white. A strange, weird, moaning sound became apparent; and then, as though a gun had been fired, a blast of wind struck the rag of a sail and almost lifted the dinghy out of the water, and I saw Bob's scheme. He was going to take the one chance of riding over the reef before the squall. The furies were behind us, and we certainly raced with them. I believe I never sailed quite so

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fast as I did lying on my back holding on to the slack of the sheet that had a turn about the seat. We quickly hit the out-swell, and were in the heart of the breakers when the full force of the black squall struck us.

I thought the mast would go, but Bob shouted, "Hang on, boss!" I can see him now, crouching, red-faced, his gray hair flying, his bloodshot eyes gazing at the maelstrom ahead, his hairy chest exposed to the storm, his big fists gripping the oar, weighing the chances. Every few seconds a great sea came rolling in, and we rose with it; and if being shot out of a gun is any more exciting, I shall hope to be spared the experience. But as fast as we went, the sea slipped away from us and broke. For a single moment I saw the bare, jagged rocks on all sides, heard the grinding of dead coral heads sawing one upon another; then a great mass of foam struck us, and in darkness that could be compared only to night, and amid a pandemonium of sounds, we seemed to be literally hurled through the air and crushed out of existence, then swept on like chaff before a gale.

Exactly what happened I never knew, but I found myself standing in the water about waist deep thirty feet over in the lagoon, and within the jetty-like hurdle, with the wind tearing the water out of its basin and tossing, hurling it into the air, while not far away was the dinghy full of water and Bob trying to hold the painter. We .

towed her further in, away from the seas, wading before the squall, and when it had passed, as it did very rapidly, I saw that we had accomplished the impossible,—had by sheer good luck taken the hurdle of the reef before a virtual hurricane, been carried over it by a succession of heavy seas. Bob never explained it, but I believe I was never quite so near shipmate Davy Jones before. There really *is* something in fisherman's luck, as our string of kingfish was still in the boat where they had been lashed.

If the kingfish was a fresh-water fish and could be taken along some lake or stream, the ouananiche or salmon would be forgotten, as no more splendid fighter or tactician can be found when played with a rod; indeed, half the tropical fishes are known only from report, and these are taken on the hand-line, which, being "a dead sure thing," does not develop their true game qualities or give them even a chance for their lives.

On one side of the key the water shoaled very gradually as it dipped into the gulf, and six hundred feet from shore it was not six feet deep. This was the home of the mullet and sardine, and here lurked the great barracuda, to my mind one of the gamiest and cleverest of fishes. To wade along the shallow edge of this lagoon and cast in front of this fish was one of the angling joys of the reef. Here the sand, made up of ground shell and the limy secretions of a certain sea-

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weed, was a very light gray, and the three-foot barracuda assumed the tint so exactly that for a long time I distinguished them with great difficulty. Floating, almost invisible, they crept like cats upon the stupid mullet, and half the pleasure of fishing was to watch this continued warfare and its success. Crouching close to the bottom, the fish moved by the most delicate and almost imperceptible motion of its fins. A mere automaton it appeared, only the fierce black eyes telling the story.

I would often wade out and stand for half an hour motionless, trying to "fool" one of these barracudas, casting my small sardine bait beyond and endeavoring to make it simulate life, so that the fish would strike. Twenty times I would bring the sharp-nosed game to the very point. Twenty times I have known it to stop, back off, after contemptuously nosing it, and then, when I was in despair at my luck, my lack of skill, call it what you will, the fish would dash ahead and seize it like a tiger. Having had the taste and smell of blood, everything looked red to it, and it rose determinedly to the surface and bolted the big bait, all the time eying me with defiant look.

Here indeed was game that was game, and how he fought! How he drew me on and on, reaching for the channel, and had I not been in need of barracuda, having passed my word to a certain

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red-faced ex-jurymast that I would provide just such a Lucullus feast for supper, why, he would have escaped in some miraculous manner. As it was, I fought him along the shining sands just as the sun sank into vermillion clouds and great rays went streaming upward,—fought him so far that I could almost imagine I heard the syncopated melodies of some yellow friends far down the reef on the next key.

After all, the joy in angling is not the killing alone, but what you see, feel, and hear while you are endeavoring to land the game, and this came home to me every day in and about this camp on the reef, in what some people would doubtless consider the most God-forsaken spot on the habitable globe. Sand and water everywhere, eternally, water and sand.

The island was directly in the line of bird migration, and during every gale hundreds of birds would be seen and driven in, rails and gallinules so tame that I frequently caught them, beautiful, radiant-eyed creatures,—eyes of innocence if expression goes for anything. The bush at these times would be filled with warblers, flocks of cuckoos, bluebirds, and others, and before long they would start, having before them a flight of at least three hundred miles over water. Later, in going from here to Pass Christian, two hundred and fifty or three hundred miles, many birds joined us in mid-gulf, and a woodpecker (flicker) did

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me the honor to share my stateroom one night. Early the next morning I smelt land, and, imparting the information to my guest, opened the door, when, without even a "Gracias, señor," it darted away in the direction of that land smell, and followed up the trail out of sight. An hour later I saw smoke and then land. Many birds are blown off the Texan coast at night, or make the ocean flight from the Guineas to Louisiana, resting at Cuba, the Florida islands, and from there across the Gulf. This is to some extent true of the tarpon, whose migrations take it from all along the Central American coast up to Florida, Texas, and even to Long Island at times,—as marked a migration as that of the birds.

Chief said Bob was not much to look at, but he was "great on broiled barracuda," and when John blew the conch, that has a tone like nothing on earth or under it, there was my barracuda broiled whole with a hard-boiled gull's egg in its mouth in default of the lemon that was one hundred miles away. Long John was a wag in his way, and the morning after he had been struck on the head by a gull's egg he turned to Bob and said, "Bob, if you see any eggs fallin', jest catch 'em on the fly, will you? I want one to settle this yer coffee."

At this moment the air was filled with terns, altogether the most remarkable sight in the way of birds I had ever seen, while the noise was an

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indescribable roar, caused by the fact that Chief was out in the brush somewhere, crossing the island from the north beach loaded with the best parts of a green turtle.

CHAPTER VIII

THE COBIA WITH THE ROD

A Splendid Game Fish. Wading and Casting from the Reef. Jacks. Their Madness. Finding a Wreck.

I NEVER wearied drifting over the clear waters of the mosaic-like reef. There was always some new fish, some rare bit of marine scenery, some fresh delight to catch the eye. I had left the outer keys, the Bull Pup was anchored at Garden Key, and the men were playing seven-up in the long rangy quarters. There was an abundance of "pain-killer," and peace reigned on the outer reef. Every day I took the dinghy and sculled out over the lagoon formed by Long and Bush keys, and the long barrier reef that stretched to the south, poled over the glass-like surface with my grains, picking up crayfishes, diving for large conchs and watching the constant and varying throng of fishes. Here were the true pastures of the sea, the groves where fishes roamed, and what at night was a vast fishes' rialto, all sorts and kinds of creatures climbing up the side of this lofty mountain to graze and feed on its coral-capped summit.

At the head of the shallow lagoon stood four or five mangrove trees. At high tide they were

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often in the water, but at the ebb, Bush Key took on the dignity of an island, and had it not been for a particularly heavy hurricane, which I understand visited the islands a few years ago, would still have been above water. Now Bush Key was making a strong battle, and out in the lagoon and all about were numerous old mangrove trunks and roots which had succumbed to gales long ago, now the homes of countless birds of the sea. Each root was the dwelling-place of radiant angel fishes, crabs that vied with sapphires in beauty, and worms whose breathing organs were like flowers of dazzling hue.

One day when skirting Bush Key, I saw out from the shore a bunch of old mangrove roots, and in the shadow of one, lying in fairly deep water, a graceful fish at least five feet in length. I do not know that I ever came so near having "buck" fever, as I tried to stop the perverse dinghy, and back her off without alarming the game, which I took for a very large barracuda. But fortune favored me, and I pushed the dinghy inshore and exchanged the grain pole for the rod, a bamboo affair about the size used for striped bass in New England or yellowtail on the Santa Catalina grounds. My tackle was a nine-thread linen line, and the hook a small 4/0 O'Shaughnessy, which I baited with a young mullet; then I cautiously waded out in the direction of the stump, having slipped on an old pair of brogans kept in

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the dinghy for the purpose and known to the men as "coral skates." The water was as clear as crystal, and seemed to have a magnifying effect, intensifying the size and color of everything. When twenty feet from the mangroves, I could distinctly see the game and far into the blue water beyond, as the reef dropped away here suddenly into unknown deeps, a toboggan slide down the coral mountain.

Presently, I could see about half of my fish's tail, which was moving gently, like the tail of a cat, though not with the same purpose; then I saw a stripe, black and pronounced. No barracuda had this. I moved carefully to the left a few steps on the dead coral rock, that I might not alarm this vision, and suddenly had a glimpse of the deep under jaw of the fish. Then the truth broke upon me; it was the cobia that Bob had promised me time and again, but always failed to produce! Here it was, the king of the tribe, and in the best of locations.

I stood a moment eying it, and if water transmits sound, the fish might have heard my heart beat. I saw it move ahead a few inches; the splendid eye came into view, then it backed in again, and I fancied that on the opposite side of the mangrove root there was a projection, a sort of roof, beneath which the fish was lying in a wide, open-eyed siesta.

How long I stood in this garden of the sea I

know not; but I took in all its beauties,—the turquoise sea beyond, the wealth of sea fans in purple and lavender, the yellow and brown sponges, and poising over them the fish which might be called the maskinongè of the sea. It was a fascinating situation, and the sun had killed the wind until the gulf was a disk of steel. The bait was reeled well up to the tip, and stepping back so that the fish could not see me, I made an overhand half cast, tossing the mullet into the water a few feet beyond the cobia, then reeled somewhat rapidly, so that the bait appeared to be swimming along before it, not ten feet away. I have watched many fishes strike, but it seemed to my somewhat exhilarated senses that this was the most remarkable charge I had ever witnessed. There was a flash, a streak or blaze of black and white, and the cobia had my bait. It jerked several feet from the taut line by a savage swing of its big head to the right, and with a swirl on the surface that tossed the water nearly to where I stood, was away. I fancied that it attempted to return to the reef, but saw me as I slipped on the dead coral at the sudden strike, and lunged outward; then it made for the outer sea, swimming down the side of the reef into deep water, an animated whirlwind. My rod and reel had hysterics. The former bowed and bent in the savage manner that a large amber-jack or yellowtail (*Seriola*) can accomplish, and the reel sang the weird barcarolle of the line-

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stealers of the sea. So long and continued a wail I have rarely heard, and I was continually edged out and on until I stood in water waist-deep on the very borders of the abyss, down into which I could see deep and deeper blues.

How long this splendid rush continued I have no recollection, but at least two hundred and fifty feet of line melted away before I stopped it, and then it hammered on the rod with a viciousness that made it creak and all but buckle. Pounding, shaking its head, it seemed to stop a moment, then shot around in a half circle, then came at me like an arrow. I reeled as rapidly as fingers could move, the powerful multiplier eating up the line gallantly, but the cobia swept in like a flash of light, towing a great bend of line after it; then, turning, made an offshore rush, demoralizing in its intensity.

For fifteen minutes this gamy fish amused itself at my expense, forcing me to prance up and down the reef, where more than once I tripped and went down into the water, head and heels, and thanked the patron saint of anglers that there were no lookers-on. For fifteen minutes it rushed and plunged, fought and hammered, until I was filled with admiration at its gaminess and began to develop an amiable weakness, which I confess to, wishing so game a creature might escape; but the cobia was well hooked, and, fighting to the last, it came slowly in, always hunting for some coral

head or some old root on which to cut the line. But I led it up the reef, and having no gaff, hauled it on to the sands of Long Key. There in the shallows I took base advantage, and as the fish doubled and thrashed, grasped it by the throat and dragged it up the sandy slope, as fine a game fish as one could wish in a thousand years.

It was nearly five feet in length, must have weighed between twenty and thirty pounds, and when fresh had two remarkably distinct stripes from head to tail, one passing through the eye. The head was flat, the back a rich dark green, a reflection of the *Zostera*, that grew all about. Over its neck was a dark collar-like mark; but the most striking feature was the tail, which was twice as large as that of a pike or maskinongè of that size, and which served to detract from the general size of the fish, and explained its fighting quality. One good whisk of that organ, and *Elaeocare canadæ* would shoot ahead like a cannon ball. Its dorsal and ventral fins were large and sail-like, the highest point being amidships. The head was sharp, the lower jaw protruding, expressing determination, the eye brilliant. In a word, this cosmopolite, this fish that is found in many seas, under many names, this gallant creature with few kinsmen, and rarely taken with the rod, was a game fish in every sense, and that night, when it was baked, and served on a piece of pine driftwood with an Havana lemon in its mouth, I found com-

pensation for the crime of taking its life. Later I caught a number of cobias, which made splendid battle for liberty, while several caught me unawares and amused themselves at my expense. The fish has all the fierceness of the maskinongè, which it resembles in a general way, and I invariably found it lying in the lee of some old wreck or mangrove root, ready to dart out at prey of various kinds. I lured it with live bait, spirit crabs, — in fact, the latter were irresistible, — while live sardines were equally fatal to its peace of mind.

One of the charms of this great reef was the variety of its game. Something new was always drifting into the line of thought or vision. In poling along the edge of the reef one morning I found a remarkable forest of sea fans at least three feet in height, and I dived down to see if I could not wrench some of them off. On reaching the grove I saw upon them a number of yellowish-pink fan shells that are in a sense parasitic on the yellow gorgonias; at least I never found them elsewhere; shells about an inch or a little more in length, of a rich yellow hue, in shape like sleeve links, and sometimes used as such. They are among the most beautiful of shells, and on the yellow gorgonia, from one of which I took five, it was almost impossible to distinguish them, so well did the colors assimilate with that of this living fan of the sea.

While diving for these shells and enjoying the

clear water that changed its temperature so quickly ten feet below the surface, I heard as I came up a peculiar sound. It came rapidly, like the rustle of dried leaves on an autumn day, then increased until it became a roar. As I climbed into the dinghy I saw near the adjacent key a region of foam on the otherwise placid water reaching from the end of the island alongshore for some distance and fifty feet out into the lagoon. In a few minutes the dinghy shot into the centre of the disturbance, and I found myself in a school of large cavallies or jacks (*Caranx bippos*), a fine fish of indomitable spirit. They had surrounded a school of sardines, and the noise was occasioned by their rushes along the surface in search of the fleeing small fry.

Having a rod at hand, I cast on the edge, the game striking on the second, nearly jerking the rod from my hands. It made a splendid rush out and around, taking several hundred feet of line, making the reel scream and scream again. As a demonstration of power it was magnificent, and before I could stop the rush the big jack turned of its own volition and came in like a racehorse, passing under the dinghy. I think the line must have been cut by the hundreds of jacks dashing to and fro; at any rate, we parted company. The demonstrations became so extraordinary that I poled the dinghy through the throng of fishes, hauled her on the beach, and literally walked out

through the school, rod in hand. It was an absurd position for an angler, as all I had to do was to stoop down and pick up the jacks, which I shortly did, grasping them by the tail. I fancied that some of them gave me an electric shock as I held them, the fish wriggling violently. Perhaps it was fancy, but any one who has attempted to hold a freshly caught bonito by the tail will recall the peculiar sensation. The beach was lined with a mass of sardines three feet wide. Utterly terrorized, they were packed in a solid mass, so that I stepped on them and could pick them up by hundreds, as they paid no attention to me. Into this and the outer masses of apparent millions the jacks were plunging. The desire for carnage had seized them, and, long since satiated with food, they were now killing for the mere lust of it, soon leaving a ribbon of blood which marked the long and sinuous shore line.

As I waded out into the throng, the jacks completely ignored me; they repeatedly struck my legs, and I easily caught big fellows by the tail, and lifted them where they were massed. In a few moments they apparently had driven the sardines inshore, where they formed an almost solid line about two or three feet thick, which they now charged with great fury, with the result that they threw themselves high and dry upon the sands. I saw as many as fifty cavallies, weighing from seven to twelve and some doubtless fifteen pounds,

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bounding up and down on the white coral sand, so reaching the water again, their silvery sides, the dark green of their backs and the flashes of vivid gold of their fins presenting an animated and extraordinary spectacle. I had heard Bob speak of "jack beats," the noise of which could be heard a mile distant, and had considered it a reef fish story, but here was the reality to confound the skeptic. I soon saw my men coming across the channel. They had heard the deafening roar from the other key, and in a short time were in the thickest of it. They pulled up the boat, rushed into the "beat," catching the jacks by the tails, and tossed them out upon the sands by the score,—jacks being in demand at any and all times. Other spectators began to appear; every gull, pelican, and man-of-war bird on the reef within a radius of three miles seemed to scent the prey, and the water and beach were soon covered with them, creating a scene difficult to describe and beyond the bounds of imagination of those who have not observed it.

The roar continued for twenty minutes; then the jacks, apparently worn out, or satiated with slaughter, drew off like cavalry and finally disappeared; but for a long time the sardines hugged the shore and permitted the birds to gorge themselves upon them. The jacks had routed them so utterly that they were indifferent to other foes. I recall Isaac McLellan's verse:—

96 THE LOG OF A SEA ANGLER

Swift speed cevall over that watery plain,
Swift over Indian River's broad expanse,
Swift where the ripples boil with finny hosts,
Bright glittering they glance ;
And when the angler's spoon is o'er them cast,
How fierce, how vigorous the fight for life !
Now in the deeps they plunge, now leap in air,
Till ends the unequal strife.

The poet of the rod must have seen a “jack beat” in the happy land of fishes, away out on the reef, where butter is a drink and milk grows on trees.

Nearly every day in May and June the roar of a “jack beat” could be heard on the reef, and I can compare the peculiar fascination it exerted only to that of a fire to some people, who rise at any hour of the night to indulge in the gratification of seeing the flames lick up house or forest. I rarely missed a “jack beat,” and often lying off a school had sport that would have delighted the most critical angler, as the jack is the incarnate spirit of war. The word defeat is not in his vocabulary. He may be out-fought, but he is never defeated; he may be whipped, but he never discovers it. There are several varieties of jacks. One, the jurel, which Chief called the *cocinero*, was splendid game, and with a ten-ounce rod I found the smaller ones delight-makers of high degree.

I had a strange experience a few nights ago. The nights have been clear and beautiful, with a full moon, and Bob proposed that we run down

to the Marquesas, some forty miles to the eastward. We started in the afternoon, running before the wind. The water was smooth, and when the moon came up every wave seemed to catch its effulgence and change to silver, while the Gulf itself was ablaze with phosphorescent light. We appeared to be sailing down a river of silver, when suddenly a deep black mass caught my eye dead ahead; a black hole in the river of moonlight it seemed, yet around the lower line the phosphorescence blazed brightly.

Bob hauled the sloop into the wind, and a few minutes later we rounded up alongside the hulk of a large schooner, a total wreck, drifting along in the great river or stream that poured through the Straits of Florida to sweep up the coast. She was nearly full of water, and the waves were sloshing over the deck and running out through the scuppers. Bob ran alongside and I went aboard. The vessel had evidently been struck by a hurricane, as the masts were broken off flush with the deck, and her rigging had gone with the masts. She was deserted, and was the picture of desolation; yet apparently her hull was sound. The cabin was half full of water, and chairs and clothing were washing about, nothing having been disturbed. She had the appearance of a ship that had suddenly been abandoned, every man leaving her without going below. There was not a living thing to be seen except a tarantula, which, when I placed it

in a saucer, could touch the edges all around with its furry legs. Either the crew were drowned, or, supposing that the vessel was sinking, they had taken to the boats, leaving her a wreck and a menace to navigation. She hailed from the island of Trinidad, and was loaded with a cargo of jelly and brandied fruit. We stood by her some time, then sailed east, where we reported the wreck, and a few days later she was towed into port. The sale of that wreckage ruined the Key West and Havana markets for guava jelly for many a day.

The keys of this reef have been the scene of many tragedies. There is little doubt that free-booters and pirates frequented them in the early times, the harbor of Garden Key being eminently fitted for a refuge in days when there were no long range guns or steamers. There are several entrances to the fine harbor, so that a fleet of schooners could easily elude the crew of a large vessel. In the period up to 1860, the reef was dotted with wrecks after a hurricane, and many wreckers made their headquarters at Key West.

Their skippers seemed to have developed a sixth sense, which enabled them to scent a wreck. Wrecks in the early days were doubtless often pre-arranged. A ship was heavily insured and deliberately wrecked. In 1903 I passed the reef to the west of Loggerhead. The sea was making a clear breach over it, and the teeth of the coral were plainly visible several miles distant, though the Gulf was

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perfectly smooth. In a word, no one could fail to recognize the spot as deadly in the best of weather; yet in 1862, during one of my early trips to the reef, I saw a large, full-rigged ship, under full sail, crash into this coral reef on a bright clear day. Twelve hours later she was surrounded by a fleet of wreckers that came streaming down from Key West like birds of prey.

CHAPTER IX

EL CAPITAN

The Hogfish. Sharks and a Turtle fighting. Rescue of the Turtle. Shooting Jacks. The Amber-Jack. Life of the Gulf-Weed. Home of the Hogfish. The Gardens of the Sea.

We had not turned a turtle for ten days, and John expressed the opinion that the laying was over, or that the turtles had been frightened off; so we decided to try Middle Key, and in the mean time "peg" a turtle on our reef. A good turtle peg can be made out of a file by using about half an inch of the end, the object being to use a sharp three-sided plug that will enter the shell of a turtle but not injure it, the peg, so far as its cap is concerned, being made like that of the grains, fitting any grains pole.

Bob sculled the dinghy slowly along, while I looked for the turtles which fed on the soft green weed or *Zostera*, and often slept there, occasionally rising to breathe. It was not long before I saw one, and tossed the peg into it just as it moved away; a moment later we were being towed up the reef, by the big game that whipped the water with its powerful flippers. But it was no match

for the dinghy, and we soon tired the animal, and, hauling the boat alongside, forced it to swim in-shore, towing us, and landed it on the sands near camp.

Chief borrowed my rifle near here and began shooting at some large fishes which were swimming along shore with their dorsal fins out of water. They proved to be jacks, and Chief killed two in this way, putting a bullet through the vertebræ.

Middle Key was much smaller than East Key, and appeared to be two miles to the west. Long John sailed the Bull Pup over with Bob, while Chief and I rowed the dinghy, it being calm and smooth, so that I might see the reef and the coral. On the way I pegged a hawksbill turtle, the kind combs are made of, the animal differing from others of the family in having its shell in great overlapping scales. A small remora was fast upon its under side.

We circled the reef, viewing great heads of coral,—the vases of the sea,—examining the sponges and fans that were suggestive of a good fishing-ground, and were slowly drifting along, when a commotion in the channel, water tossed into foam, attracted my attention. Pushing in that direction, we succeeded in running near a huge loggerhead turtle, the largest I had ever seen, that was engaged in a deadly struggle with a large shark. The turtle had a bulldog grip on the shark,

which occasionally plunged down, taking it out of sight; but up it would come again, the shark bending and snapping at its grim, armored adversary, that, undoubtedly, would have ultimately killed the shark had we not interfered. They evidently saw us, and the turtle made an effort to escape, while the shark wrenched itself away. The turtle I found to be completely helpless. The shark had bitten off its flippers, leaving mere fringes of flesh, and had attempted to crush the side of shell. The turtle must have weighed six or seven hundred pounds,—a giant and an antediluvian. Its huge mouth was cut and worn into leathery teeth, its lips perforated with parasitic worms, its eyes enormous and dull; altogether, it was a picture of great age and decrepitude. We towed the helpless reptile into shallow water away from the sharks, and gave it a chance for its life.

Middle Key we found a small duplicate of East Key, and one of a line of keys which seemed to extend to the westward, terminating in Logger-head, five or six miles distant. The boat was anchored in the lee and the smoke of our campfire rose on the beach as we went in. A few birds were flying about overhead, and later many young were found in the bush. As in the other keys, a platform or reef surrounded it, gradually deepening to the blue channel, on the edge of which the coral flourished, and formed a perfect fishing-ground. Acting on the suggestion of Chief, I de-

termined to try it. He said it was the only place about the keys where he had ever taken the amber-jack, and when he told me the size of the fish he had caught with a large cotton hand-line I lost no time in making the attempt. I fished this channel in all fashions for three days, but never saw the fish I desired, though I took several large barracudas.

One day Chief was rowing me in the dinghy, I having rigged up a box seat on which I could sit facing the stern. I was using a fairly stout green-heart rod eight feet long, weighing ten or twelve ounces, with a number twenty-one linen line and live mullet bait. I had tried on the surface, exhausting about all the points that Chief could think of, or suggest, and had allowed my line to sink about ten feet, when it suddenly straightened out, *z-e-e-e-e-e-e*. I thought it was a shark, as this vermin of the reef was always on hand; but this was different game, my reel singing high and low in a long wail that meant many yards of line, *z-e-e-e-e-e-e*. The rush of the fish was so sudden—so electric, for want of a better word—that I fancied it a jack or a bonito,—two fishes famous for quick action. It soon had the dinghy moving as I stopped its rush, and made a splendid half swing around the boat with its belly turned upward, so that it appeared a silvery flash of light against the deep blue of the channel, at which Chief shouted, "Amber-jack!"

Here was luck of a specious and definite quality, and I played the gamy creature with all possible caution, mentally classing it with the "delight-makers." Several times it came in on the line with a splendid burst of speed, turning quickly, as though to break away and gain sufficient force to outwit the unknown enemy which held it. Now it would plunge into the channel, as though sounding, and threw me into despair, lest the line should touch a coral point; and doubtless this was what the big fish had in view, but by sheer good luck I held it and continued to gain.

The amber-jack never gave up; it fought the good fight every second, and did everything but jump, lashing the surface at times in sheer madness, or perhaps in the hope of cutting the line or discovering some weak spot in it. Chief succeeded in keeping the dinghy stern to the game, despite its rushes, and at the end of twenty minutes I had it well in hand, and saw it swimming around in a circle; then I gained ten or fifteen feet and brought the splendid gleaming creature across the quarter, always bearing off; then Chief gaffed it, and held it while it tossed the spray over us in a last effort.

This fish was three and a half feet long, thick-set, but well proportioned, and must have weighed thirty or more pounds, one of the most attractive and gamiest of all the fishes of the reef. I found it a fairly common fish, but not a common catch,

at least here. In playing the fish I could not but wonder what would become of a typical salmon rod designed for forty-pound salmon. It was my opinion that the amber-jack of forty pounds would make kindling wood of it, so much does the fish exceed the salmon in agility and fighting qualities. Nearly all authorities underestimate the size of this fish, which, like others of the *Seriola* tribe, are among the very large fishes,—running up to eighty or even one hundred pounds in individuals.¹

We carried the amber-fish in and feasted on him in royal fashion. John dug a pit in the sand, lined it with shells, then built a rousing fire in it and piled seaweed on the coals. On this pyre was deposited the amber-jack, whole, wrapped in cloth, and when baked it was served on an oar-blade; and I am prepared to assert that planked amber-jack is food for the gods.

On this prolific reef the large fishes are so common that the angler often neglects the small fry; but I had light tackle, small hooks and lines, and experimented on all the lesser game that came my way, and can add parrot fishes, angel fishes, the doctor fish, and many more to the list of good fishes. Of all this throng the doctor fish (*Teutbis*) was the strangest,—a high, big-eyed, long-finned

¹ The record amber-jack for 1905 is a 92-pound fish taken by Mr. John B. Cauldwell of New York, which was caught with a 13-ounce rod in three quarters of an hour.

fish somewhat resembling the porgy. I had often seen the "doctor" when watching the fishes in a large coral head with a water glass, and had observed singular movements,—a peculiar whisking of the tail, well understood after an examination of the "doctor." I caught it readily by using a small fly hook with crayfish bait. But its mouth was very small and armed with a peculiar array of teeth that easily crushed a delicate hook. My first catch was about eight inches in length, and when netted and brought in, it gave a vivid demonstration of the appropriateness of its name, as on each side of the tail was an opening from which protruded, at will, as from a scabbard, a sharp, bony lance, suggestive of the sting of a bee on a large scale. With this weapon the doctor of the sea lanced its companions, and later, when I kept one in a tank, I found that it made war against all comers,—cutting and slashing them and easily killing small fishes, as sardines, herrings, and others. I placed a cowfish, which is encased in armor and provided with horns, and a doctor fish in a tank together; the doctor immediately attacked the other, but to no purpose; the cowfish was a knight in armor.

In hunting for the amber-fish I fell in with a mass of algæ or sargassum that to the east is caught in the great tidal vortex and constitutes the Sargasso Sea. This was a floating island an acre in extent and a world in itself. In the centre were lanes and openings in which swam the flying gur-

nard, a dazzling creature which I tried to capture from the dinghy; but it was proof against my allurements. This is the fish that has astonished anglers by seizing the bait and dashing into the air and soaring away. Such an experience was vouch-safed to Dr. Moseley of the Challenger; but I gave up the attempt, and, alarming the fishes, saw them shoot away over the surface, catching several that landed on the surface of the sargassum. A more attractive fish it would be difficult to imagine, but its head encased in armor makes it a dangerous projectile to encounter.

This floating island had a life peculiarly its own. Crabs, shells, and fishes were in the main colored the exact tone of the weed, thus being perfectly safe from the laughing-gulls soaring around with eager glance. The most interesting fish was a curious creature that even in shape resembled the weed; its head being colored, and its foot-like fins and some other parts even shaped, like the fringed sargassum. This fish, called the "walker," from the fact that it was supposed to walk on the bottom, lay prone on the weed, and near it I found the nest, a ball of sargassum about the size of a Dutch cheese, wound and interwound into a globular shape and held together by threads of a glutinous secretion resembling starch, which the fish takes from a pore in its belly. The eggs, about the size of small shot, are attached to the nest, and when hatched, the young find protection in the mass of

weed. There were dozens of these fishes in floating islands drifting along up the Gulf Stream to be thrown off somewhere and sent into the great eddy of this floating sea.

As I drifted with the island I looked down and saw at least a dozen amber-jacks of about fifteen pounds each, swimming in the deep blue water. My dinghy was twenty feet from the edge of the floating island, and over this I cast, watching the actions of the fishes through the azure window. The moment the mullet struck the water, they charged it, evidently thinking it a jumping fish, and one seized it, as I hoped, making directly away; and floating on the verd antique matting, I played my second amber-jack, Chief breaking the dinghy out of the thick mass so that I could reel and bring the lusty creature to gaff, which I did in about fifteen minutes.

Middle Key was a famous place for shells, the beach at times being made up of the smaller varieties, and quantities were occupied by hermit crabs. I filled my pocket one day with the latter, to discover that they crawled out almost as fast as I put them in, my back in a short time being covered with them. In the coral here were quantities of cypræas, which the men called micramocks, a beautifully polished creature protected by a fleshy covering which made life in the branches possible. From a survey of this great reef it was evident that the coral polyps or their eggs are swept

around from the tropics, and have established a reef here which in time may extend out and connect Florida with Mexico or Yucatan. This is conceivable, if we allow the correct number of millions of years for the consummation.

Middle Key is a patch of arid sand, covered here and there with bay cedar and prickly pear, with now and then a patch of tussock. The sand is ground coral, shell, and the limy secretion of a seaweed, white as snow. Its only available production is the fruit of the prickly pear or tuna, and eggs of the tern and noddy. But off from this key stretches a garden of the sea of marvelous beauty — groves of sea fans, sponges, and plumes in glowing tints and colors of yellow, lavender, pink, and black. High sponges dot the bottom like seats, and scattered about are vast coral mounds, — the hills of this landscape beneath the sea.

Gazing into this attractive region, I caught a glimpse of one of the largest man-eater sharks it was ever my fortune to see. It came swimming along beneath me with dignified mien, moving slowly and evenly. It had a number of remoras clinging to it, at least a foot long, standing out black against its tawny hide, and swinging like banderillos on a peaceful bull. About its head was a swarm of pilots, one or two of which swam in my direction; but the monster, which to my excited imagination appeared nearly twenty feet in length,

paid no attention to the boat and was soon swallowed up in the deep blue of the ocean.

The hogfish, a favorite food fish here, has not, like the tarpon, many attractive titles, as the Silver King and *Grande Ecaile*, to add to the romance and lustre of its personality. It is just plain hogfish, nothing more; but there was never a better example of gross misnaming, as our hogfish is a cavalier among fishes, debonair, bedecked with streamers, brilliant in color, bright of eye; a fellow of infinite jest,—you can see that by the way it rolls its cunning eye; and that it is an implacable fighter, a type of courage, you may take my word for it, backed by the evidence of more than one broken tip and swim rather than lose the hogfish. Why this really beautiful fish was ever called what it is it would be difficult to say; it is a bare possibility that its enormous mouth—for enormous it is—caught the eye of the first white man to see him. In appearance it calls to mind the angel fish, as the dorsal fins are long and reach back, plume-like. It is two or three feet in length at its best; tips the honest scales at twenty pounds at times, and finally is a living blush, blazing, when I have caught it, with a most beautiful crimson or dark red hue, varying very much according to location and depth of water; but always red in some tint, the color it fights under.

I have never met a fisherman, or angler, who had caught this fish with a rod, though doubtless

there are some. It is usually a "hand-line fish," coming up from forty or fifty feet with great reluctance. Finally,—to conclude its brief biography,—the hogfish is a delicious creature baked, as Long John served it, with a large lemon in its mouth, and chablis that had a bouquet suggestive, in an insidious way, of smuggling. I found, all by accident, a preserve of the hogfish, and I discovered it in a happy way. There was at Garden Key an atoll forming. Sometimes it made a courageous showing above water, in a long line of dead coral rock, a mile or two in length, forming the outer guard of a fine sandy lagoon; but the hurricanes, or squalls, always seemed to beat it down at the wrong time, and I believe to this day a line of breakers marks the efforts of nature to create an atoll. At the north end of the line there was at the time of my last visit a little key, with a dozen or so mangroves on it; but I learn that even this has been washed away, to come again, perhaps, in the next century. The normal condition of this reef was a line of breakers, which pounded with ceaseless and musical roar, dragging back the small rocks and bowling them up again in an endless game.

But there were days and weeks when the sea was down, its surface glasslike; and at very low tide the coral rocks were just at the surface, the sea laving them gently. At such times it was possible to wade out thirty or forty feet from the reef

and stand, waist deep, in a veritable marine paradise, a tropical garden in which waved the most beautiful objects of the sea; the gorgonias, plumes of brown and purple, rich reticulated fans of lavender and yellow, delicate fernlike algæ, great pompons of purple, yellow, and red sponges,—all presenting a vivid and charming kaleidoscope of color amid which, poising and swimming lazily about, was the red hogfish, accompanied by a train of courtiers, parrot fishes in green and yellow and with tails of vivid tints.

I had long known this garden spot, but had never suspected that I was encroaching on the preserves of the hogfish, which I had always caught in deep water with the despised conch bait; but coming in one day with a wrecker through the five-foot channel I caught glimpses of several fishes against the face of a deep roller, and decided then and there to return at the first dead calm or favorable opportunity. This came at the full of the moon, when the tide ebbed so completely that the tips of coral branches were exposed all over the reef, on a day that was breathless from early dawn until night, and on and on for two weeks. As Chief rowed me out to the reef the sea was like glass, the horizon lost somewhere, sea melting imperceptibly into sky. The only sounds were the resonant "ha-ha" of the laughing-gulls, which lumbered along, looking for some pelican to filch from, and the musical and mysterious crackle of the

water upon the bottom of the boat. The portion of the reef out of water was not more than ten feet across, a narrow coraline backbone a mile or more long. Upon this we hauled the dinghy ; then taking my rod, grains, and a basket of fresh crayfish, I waded out toward the blue water that was enticingly near.

The submerged reef in this direction was interspersed with great heads of coral, four or five feet across and three in height. Once they had been veritable globes of coral of a rich green tint ; but now they were hollowed out by a thousand enemies, which had insidiously eaten into them until they stood like great vases of Neptune filled with gorgeous gorgonias and fishes in splendid vestments. Wading out up to my waist in the mimic forest, I reached one of these coral heads and climbed upon it, thinking to use it as my vantage ground. From here out, the water suddenly deepened, dropping away into colors which graded from green bands of light to labradorite blue in exquisite tints, through which could still be seen the graceful plumelike shapes of the gorgonias, the flashing scales of some exotic fish, or the sparkle of *Sapphirinae*, red, yellow, gold or blue. With them the lacelike forms of jelly-fishes moved up and down, or drifted with the listless current, garnishing this garden of the sea with added splendors. Peering out and down, I presently saw the fantastic hogfish, the yellowtail,

parrot fishes, and a host of forms making up this gorgeous court. As I have said, the mouth of the hogfish is its most conspicuous possession, hence I baited my hook with half of the tail of a crayfish, a bait which was so common here that the coral head upon which I stood was fringed with their whips as they backed beneath its sheltering eaves, made up of countless polyps.

Chumming with the *rejectamenta* of the crayfish, I saw the motley throng rise to meet it, and with a side cast, dropped the luscious bait fifteen feet away, directly over them. Of all the bait on the reef,—sardines, hardheads, crabs, conch, and shrimp,—crayfish is the most alluring ; the fishes seemed unable to resist it, and the brilliant court of the hogfish rose and threw themselves upon the “chum,” tearing it apart and filling the water with tints of rarest hues. Then fell the bait, the *bonne bouche* of this feast ; and as it settled, the copper wire leader being invisible, the yellowtails darted at it, surrounding it with a golden haze. The reel was clicking back retorts courteous to their attacks, *zee-zee-zee* ; the bait rent and torn by this small fry in a marvelous fashion was fast disappearing, when up through the gay throng of bait-stealers came a vision in red, with trailing plumes. The finny varlets fell away as the hogfish darted at the bait, passed it in sudden fright, turned again, and like a blazing meteor rushed at it, engulfed it, and was away.

It was a splendid strike, and I saw it all as plainly as though looking in a mirror. Then came the scream of the reel, *z-e-e-e-e-e-e-e!!* as the great fish bore away, almost unfooting me from the living pedestal. Down he went to the bottom, making the line hiss to the exhilarating cadence of the reel; up to the surface with a bound, where for a moment he flashed along in a mass of foam, a blaze of red, perhaps to eye me furtively and then sound deep into the gardens of gold, purple, and azure. During these rapid and highly exciting manœuvres I had lost nearly two hundred feet of line, given out under strong protest, as the reel held but three hundred feet. And now a sudden rush caught me unawares, and, losing my foothold, I fell into the interior of the coral vase, the reel singing merrily to my discomfiture, the hogfish surging away into deep water.

But I stopped him before he had taken fifty feet, and standing, elbow deep, began to reel him in. How he fought! bearing gallantly against the rod, which bent and thrashed the water beneath his struggles; now placing himself sideways against me, all his broad fighting weight opposed, then darting around in a semicircle, he endeavored to come in on the slack line, to stop suddenly as firm as a rock,—a clever ruse known to salmon, tuna, and other game fishes. By half swimming and much ludicrous floundering I reached the top of the coral head again, just in time to meet a

splendid rush of the fish, right away like an arrow from a bow, making the reel sing in high key, z-e-e-e-e-e-e, the water hiss *tse-tse-tse-tsesese*, as the fine line cut it like a knife blade. Then, in angling parlance, I gave it the butt, rounded it up on the slender thread, despite its frantic bearing off, and gradually reeled it in.

As I slowly turned the handle of the reel my eyes wandered along the surface of the sea, which, like a steel mirror, lay in the torrid sun, reaching away to lose itself on the horizon line, blending with the ineffable blue of the tropical sky. As I looked, a single object broke the perfect calm,—this the triangular fin of a large shark which came sailing down this ocean highway, a wanderer, perhaps, from the outer sea, a *voyageur* sunning his back in the torrid rays, or perhaps to the manor born and literally on the promenade.

The hogfish was bearing away stoutly, not fifty feet in advance; and the tension suddenly increased as I knew this hound of the reef would charge the hogfish as soon as it struck the scent, and that my game would make a desperate effort to escape on recognizing its enemy. I was not mistaken. The shark began to quicken its pace; the little ripple before its dorsal fin increased, the fin throwing water like the blade of a knife; then the shark commenced to swim in a circle, hunting for the scent like a foxhound, and suddenly finding it, dashed at the hogfish, which

sounded, turned quickly at the bottom, and came toward me at full speed. I reeled with desperation, hoping to hold the fish and bring it to gaff; but crazed with fear, it darted from side to side, and ran around me into shallow water thirty feet in shore.

The shark had lost the scent and was swimming about in an erratic course a short distance away, now sweeping by the rock — ten or twelve feet of menacing disagreeable personality. Waiting until it turned off shore, I plunged into the water and waded in, reeling as I went, reaching knee-deep water as the hogfish made a dash for deeper regions, and playing it gradually along the reef to a little sandy inlet, through which I finally led it to the lagoon. In some miraculous way that particular hogfish escaped, and I confess to being a party to the act, while Chief wondered at my stupidity in permitting a caught fish, and especially *el capitán*, to slip through my fingers. It was a case of Scylla and Charybdis to the gamy hogfish, and that he preferred trying conclusious with me to taking chances with the shark, there was little doubt.

At times the outer reef was a line of white foam two miles long, a sea beating so violently that the very sound was ominous of disaster; yet a few hours after these sporadic squalls, or hurricanes, the surf would melt away and the summer sea lie with its bosom unruffled save by the fin of some vagrant shark, or the leaping gar-

fish, which ricochetted along the surface. Many and varied were the experiences on this and other submerged coral heads, on the borders of the preserves of the hogfish. I once hooked a fish of such size that in a single run it exhausted my line; then I lowered the tip, and finally losing my footing, toppled over and found myself swimming a few feet after the unseen game, still holding the rod. By mere good fortune the fish turned, by its own volition, and I threw myself upon my back and swam in, holding the rod well up, until I reached bottom, when, standing nearly waist deep, I played the beautiful fish, that plunged up and down the reef; now rushing along the surface, again deep among the graceful plumes, slowly but surely coming in on the musical reel.

But after all, it is not the conquest of the hogfish, its weight, its size, or indeed its method of playing, that is the soul of the sport, but the whole picture,—the blue sea, the carpeted depths, the color schemes, the cry of the sooty tern, the garulous ha-ha-ha of the laughing-gull over the reef, the music of the coral rocks, castanets of the reef, which clash and ring as the waves draw them back to hurl them up again, all features and factors in the angler's field of vision and hearing, which go to make up one day's perfect fishing in these preserves of the outer reef.

All are but parts of one stupendous whole,
Whose body nature is, and God the soul.

CHAPTER X

EL ROBALO

A Game Fish. Taking a Large Fish to lose it. Fight with Sharks. A Tiger of the Sea. Subduing a Man-Eater. Size of Sharks. Danger from them. Tarpon taken.

I MET the robalo first in the old market along the levee at New Orleans, and thought it a pike-perch, its trim appearance, powerful tail, and large mouth suggesting a game fish ; but the market-man, when I questioned him as to its habitat, waved his hand vaguely in the direction of Pensacola, and said they came from "down yander." So when I found myself "down yander" some five hundred miles to the south, on the reef, I began to inquire for robalo. Bob and Chief knew it, but had never seen it caught. Long John, when three sheets in the wind and very close hauled, dilated upon his catches of robalo, and so fired my appetite for the fish that I thought of little else. But when morning came, and Long John saw through a single barrel, his pictures of robalo were not so highly colored, and there was a vagueness about them that was suspicious. The certain channel where he had played a robalo for an hour could never be found, though he spent hours at night in the second story

of the old slave quarters telling about it, showing an especial nicety in detail. In a word, Long John shook out all the reefs of his imagination under the influence of the pain-killer of Mr. Davis, but he invariably furled all sail the following morning.

By this it should not be inferred that anything in these records is to be considered as criticising my loyal boatmen. Better men, truer hearts did not exist. My reputation was as safe in their hands as though I had attended to it myself. Every fish I took with the magic rod they weighed mentally in a royal and beneficent fashion. I heard Chief tell a captain of a visiting steamer that I had taken a gray snapper that weighed "sixty pounds with my eight-ounce trout rod," to which Long John cheerfully swore. All my catches grew and expanded after death and o' nights, so that I really began to believe that I had taken some of these monsters. This faithful trio may not have been rod fishermen; they knew very little about fine tackle and reels, but their imagination filled an eminent domain,—it was limitless. No one could ask more. With such historians what more could the most exacting angler desire?

But I have caught, and landed, a robalo, an event which proves that everything comes to him who has the patience to wait. It was many months after I saw the shapely fish on the levee that I felt it on the rod. Surely patience is the essence of angling. Shakespeare must have been an angler.

Othello says, "How poor are they that have no patience," and as the wealth of the angler is the game, he is poor indeed who lacks this essential to success. In Troilus and Cressida we find the suggestive lines, "He that will have a cake of the wheat must needs tarry the grinding." And so he that would fish and land his game must sit and sit and sit. I have seen Long John, when tarpon-fishing, lie on the sands all the forenoon, one leg thrown over the other, the hand-line between his big and second toe, with a half turn about the former; and there he lay, a recumbent drowsy patience that came into its ultimate reward. But time was not a factor in life in these halcyon days on the outer reef. When the days were hot and the water clear as glass, we often took the dinghy and sculled down to the south end of the lagoon where the old wreck lay, the last of a great ship that had been blown in here by some terrific hurricane and carried far over the outer reef, and landed in shallow water. She was a monument to the energy of the *Teredo* and *Limnoria*. Her wood-work had nearly disappeared and had been replaced by the delicate shells of the *Teredo*, that doubtless possesses such a sensitive touch that it avoids the tubes of others. So the hull stood resisting the wind. Where the hold had been was a marine aquarium filled with coral, forming a fascinating seclusion for numbers of fishes.

It was my habit to scull up to the old wreck,

carefully climb aboard, lie on the deck and peer down into the home of the fishes. I have spent many hours here watching them, unseen and unsuspected. One morning I reached the wreck at sunrise, intending to grain some crayfish for the day's fishing. As I approached near enough to see the water-line of the hull I saw the head of a robalo back to the first fin. Perhaps you have been a "grub staker," or have worked in a diamond mine, and have made a strike after years of failure. Then you will know the sudden ecstasy, the elation of the angler at the discovery of the game he has searched for a long, long time. There was no mistaking it, the long, straight under jaw, the sharp muzzle, the big, black, hypnotic eye, the arched back. Robalo it was, and so closely did it resemble the sand upon which it seemed to rest, that I almost fancied it the ghost of a robalo, a phantom of delight. It apparently did not notice me, and I backed away, went aboard and peered down through the hold, hoping to see the entire length of my robalo, as I already claimed it. Ah, there it was: the long, slender body, the striking sail-like dorsals, the big, forked tail, emblematic of power and sudden line-breaking rush,— and what was better than all, a giant, as the fish that met my eye was three times the size of those I had seen in the markets, promising

A sport that wrinkled care derides.

I had seen almost such a fish in the St. Lawrence when bass-fishing, as it appeared to me to be the image of a herculean wall-eyed pike, the resemblance being more than remarkable; and as I watched it I could see the graceful screw-like motion of the tail suggestive of the imperceptible twitching of the tail of a cat or a tiger, ready at the second to leap into action; and I felt that at the slightest alarm the great fish would dash from cover and not stop until it reached the deep waters of the lagoon some distance away. So I drew back cautiously, got into the dinghy and shoved off and began a search for live bait. Mullets were omnipresent, and I shortly located a school and secured a dozen with my cast-net. Carefully baiting one through the lips I returned to the wreck. Robalo was still there, but had backed in under the shelving roof so that only its muzzle could be seen. I poled thirty feet away, and made a successful cast, dropping the silver mullet about twenty feet beyond it, then dragged the lure slowly and carefully across its line of vision.

The water was so clear that I could see every object distinctly. I caught the sudden forward action of the fish when it noticed my struggling bait; saw it backing off several inches, actuated by a second thought or suspicion, and then saw it settle nearer the ground like a cat about to spring. I had reeled the mullet to a spot exactly in front of the fish, and not five feet from it, the

long wire leader sinking into the sand and becoming invisible. The mullet, performing its part by struggling fiercely, and being held by the lips, presented a perfect pantomime of a mullet or carp feeding; now turning its silvery sides, which caught the sun's rays, making a most enticing lure.

The robalo had its black eyes upon it, and crouching low, moved in and out for several eternities, so it seemed ; then it began to creep out, its body coming into view like a car or a torpedo coming out of a tube. It almost appeared to be creeping along the bottom, and I fancied I could see it pale, so marvelously did it simulate the sand. It swam slowly up to the mullet, stopped, then seized it, so suddenly that I did not follow the motion, and rose, dragging the wire leader from the sand. A convulsive movement and the mullet disappeared, and then impressed that the psychological moment had arrived, I gave the robalo the butt and the merriest fight in which I had indulged for many a day was on. I feared the fish would take to the wreck, but not he. I did not know him, — he scorned subterfuge. With a leap to the surface he turned and dashed for clear water with Yucatan only before him ; and that he would reach it, I had little doubt. I had been standing in the bow of the dinghy, and as the reel whistled and screamed I stepped back, and with an oar turned the bow of the light craft to the fish that was flying down the

gradual slope of the lagoon over a clear and beautiful sandy bottom, the home of the queen conch and the promenade of the giant ray.

It was a splendid burst of speed, and despite my pressure upon a leather pad thumb-brake for the right hand, and the fact that I stopped the line with my forefinger and thumb above the reel, as occasion offered, the robalo took at least three hundred feet of my fine, nine-thread linen line in that one leap. Some finny Hamlet must have cried, "Come give us a taste of your quality," as we had it well served. There are few fishes that can contend against a long line. It is a cobweb-like affair in appearance, but deadly after all, and it stopped the robalo, rounded him up, curbed his fancy, so that he shot around in a great circle, the line cutting the water, the rod vibrating, and all that virile magnetism — I can call it nothing else — running up the line and rod like a series of electric shocks.

I do not believe my robalo weighed over fifteen pounds, yet it hauled the dinghy over the water, and when I forced the fighting it turned and came in, to rush away again. I believe I fought this fish fairly. I gave it more than a fair chance for its life. I did not force it, nor did I endeavor to "snake it in." I used what diplomacy the exigencies of rod, line, and occasion seemed to demand. I did my best, yet the robalo did not reach the dinghy within thirty minutes, and then, when I

held it on the quarter and looked for the gaff, it was not there; so I was forced to grain it, a murderous act for which I hope for absolution. Then I drew it in, still struggling and lashing the boat, gaping at me with its enormous mouth with supercilious leer.

I have given this robalo's weight at fifteen pounds; I think it was nearer twenty-five, but alas, I cannot prove it. I lifted it out, took in its many beauties,—its dark green back, silvery belly, the broad black stripe; then, as it was bleeding badly, I ran a line through the gills and dropped it over astern, took the oars and rowed slowly in. I had the robalo,—there was no question about that, and I proposed to demonstrate the fact to my men without waste of time. I had a mile of reef to cross where the coral was so near the surface that I nearly grazed it, then a deep but narrow channel. When midway in the latter I stopped to watch a radiant jelly-fish, one of the most interesting of all these dainty animals. Its myriad pumps were all working, its mercury-like rod pointed upward, and the wonderful colors, red, yellow, pink, and rose, made it a thing of beauty against the vivid turquoise of the channel. I sat resting on the oars, gazing at this charming vision, when something jerked the stern of the dinghy down at least six inches. I sprang astern, and there, amid the swirling waters of a mimic maelstrom, saw the tawny striped body of a tiger shark, longer

than the dinghy. The robalo and I had parted company. There are occasions when words fail, when without warning joyous life takes on a sombre hue, and this appeared to be one. The shark circled about the boat just out of range as I took the grains and prepared for my revenge.

I sculled up and down. I tossed over other and luscious baits. I lingered until the sun was overhead, and dogged this mendacious tiger of the sea hither and yon, in the hope of recovering my robalo, and incidentally him, as I knew the story of my taking a twenty-five pound robalo, without the fish to show, would be received by my men with certain stolid looks which they assumed when they suspected that virgin truth had been outraged. But the shark, though always in sight, kept too far below the surface; it even followed me in, and as I landed I saw the tomb of my robalo and its monument, the dorsal fin of the tiger shark, sailing out through the northwest channel. I had had the experience, but I did not mention it, nor did I ever again catch so large a robalo.

I landed a remora to-day, the fish with a Venetian-blind-like sucker upon the back of its head, which it fastens to the sharks and other large fishes, when it wishes a tow. When hungry it casts off and swims rapidly about, feeding on the small bits dropped from the host's table. I have never seen a shark attempt to seize one, though

I have observed the remora darting about with a wriggling motion within a few feet of its mouth.

There are several species of remora, all of peculiar appearance. I found one fastened to the operculum of a spearfish; and two were caught on a pegged loggerhead turtle. This species was jet black, with two white stripes from head to tail,—making it a most conspicuous object. I recall seeing two or three attached to a fifty-pound drum-fish which came sailing along with its companions trailing from its sides like pennants. The common remora of the sharks was dark or brown, and had a darker stripe with light edges. I killed a black grouper that proudly bore four of these dusky, big-mouthed attendants, which would often take a crayfish bait. I caught two one morning, the companions of a large shark that was hovering about. One I hooked not three feet in front of the shark's nose, where it coiled like an eel for a few seconds, doubling and struggling, yet the shark apparently did not notice it. Bob told me that he had seen them on the porpoise, the big amber-jacks, and dolphins at sea; but this doubtless was another kind. The largest remoras I have seen were sixteen inches long, and were wrenched from the side of one of the largest man-eaters I have taken, a monster that could have dined upon a horse. I performed a post-mortem upon him with this result. Contents of its stomach: three tin cans of beef which had

been merely punctured, condemned by the quartermaster, and tossed overboard, one piece of old, frayed rope, one horn of a steer sawed off or blunted, with a large piece of the skull attached, three hoofs of steer, a turtle's head and flippers, and a quantity of extraneous matter,—a prodigious scavenger.

I watched a tarpon chased by a shark to-day, the fish making a marvelous series of leaps; yet I fear it ultimately fell a victim to the shark. The leap of so large a fish is a wonderful performance. I have seen many tarpons in the air on my own hook and that of fellow anglers, but I do not remember seeing two positions alike. There is no stereotyped leap; the fish is crazed, and up into the air it goes, doubtless always away from the pain-centre. I have seen a tarpon rise bodily into the air and swing itself over upon its back, which struck the water first. Others come up tail first and turn a complete somersault in the air. Others again seem to rush directly upward and drop tail first; and I have seen the spectacle of a six-foot tarpon, seemingly poised in air, fanning itself with mighty blows and moving through it at the same time, dropping ten or more feet from where it came up out. I was told by a fisherman that he had seen such a tarpon make a side leap of full thirty feet, and from the jumps I have observed I should consider this not impossible.

The tarpon is not considered a dangerous fish from the point of actual attack, yet a number of cases are on record in the Gulf States of men who have been killed by tarpon striking them. I was fishing one day near an inexperienced angler, who insisted on following me up, probably from a motive of companionship, and my attention was more than half the time engaged in keeping my boat away from a wild tarpon, that appeared to consider me the cause of all its trouble and to be possessed of a grim determination to come aboard. I kept away, and after half an hour the angler had the fish alongside, when he ordered his boatman to gaff it and haul it aboard. The channel in which we were fishing was notoriously a bad place in which to capsize. The sharks were past-masters in their various appetites, and I heard the boatman explaining this, telling the angler that the boat, a skiff, was altogether too light to land the fish in, and that the proper thing to do was to beach the tarpon. But the angler insisted and the boatman obeyed orders and jerked the fish—a virtual living steel spring of tremendous power—into the skiff. The result was definite and certain; a fountain of chairs, oars, men, gaffs, rods, and bailing tins seemed to shoot into the air, in the centre of which was the tarpon rampant. It swept the decks, and every time its tail or head touched anything, something gave way. It was the most exciting and interesting example of

ground and lofty tumbling of man, fish, and appurtenances, I had ever witnessed.

The tarpon is the spectacular king of fishes, and if all the marvelous tales of its struggles for liberty could be told and illustrated by anglers of the world, the mere recital would tax the credulity of many who do not go down to the sea in ships. Walton bore this in mind in his philosophical conversations. On this part of the reef the tarpon was not common. The great fishes migrate north and south like the birds, and while some always winter on the Florida reef, the greater number retire to the south. This migration is well defined on the Gulf coast.

The long slender spit of sand known as Long Key, later swept away by a hurricane, was a favorite place for beach fishing. Out from it extended the shallow sandy reef where the nurse shark lived,—a region that gradually deepened to the edge of the channel, abounding in coral of all kinds. Midway up the beach I cast one morning after Chief had taken some fresh mullets with the cast-net, and it was not long before the line began to run out; when I struck, a vision of silver went into the air, the spectre that makes the average man's heart stop for a second, and then sends the blood madly through his veins. There is nothing quite like it, in all the world of angling. This tarpon came up bodily, and hung a second between water and sky, its massive gills wide open,

so that I fancied I could see through them, its extraordinary mouth agape, while it lashed the air with ponderous sweeps. Down it fell with a crash, then, like a soft-toed wild cat, seemed to bound into the air again and again with wonderful rapidity.

Once, twice, thrice, literally dancing away across the shoal eight or ten or more times on its tail, but in a series of splendid leaps, how long, how high, with what force, no man can tell, unless some angler of icy composition will rise who can composedly regard the playing tarpon and compute its jumps.

It was magnificent,—there is no other word for it, and at the last leap this king of fishes made a run that so diminished the line that it forced me waist deep, out onto the reef, while my men, all of whom now came up, ran along the sands, watching the game of give and take. Had the tarpon found the channel for which it was hunting, the game would have been over at once; but by sheer luck I forced it north along the shore and played it, and watched its leaps, gradually wearing it out, until the men rushed in, and grasping it by the gills, hauled it upon the sands.

It is an unfortunate fact that this king of game fishes is poor eating, yet fortunate for the fish, as all caught are released. In fishing off the south end of Long Key one day, I hooked a ten-pounder, a cousin of the tarpon, and literally

played my first fish in the air,—a dazzling, whirling dervish, pirouetting, leaping, caracoling in a maze of contortions, finally flinging the hook ten feet away, in a burst of gyrations. I tried it again with a light bass rod, a small mullet bait, and found that I had discovered a corner of the ten-pounders. They invariably went into the air when hooked, seemingly with a determination to stay there, presenting a bewildering spectacle. The point was to keep a taut line with ten-pounders, as all the display was made to toss out the hook.

Not far from here I caught the ladyfish up to seven pounds, between which and the ten-pounder there was little to choose, as to game qualities, both ranking with the tarpon as high jumpers, often giving the angler the impression that he is playing a fish literally in the air.

When the extreme low tide came on the reef, the long barrier, upon which a heavy sea pounded at other times, was bare, and I could follow it a long distance. It was made up of dead coral rock, being the framework of a key to be born in the future. Under these rocks I found the beautiful *Cypraea*, or micramock, and wading out from it, the best fishing on the reef. The water deepened quickly, the bottom being a forest of lavender, yellow, and brown animals, plumes, sponges, and gorgonias of the most beautiful description. Here was a forest of the most attractive of all corals,

the leaf, growing in huge, broad, palmate shapes, while not far beyond rose great heads four or five feet wide, often hollowed out and standing like gigantic Neptune's cups filled to the brim and abounding in rare and radiant fishes of all the hues of the rainbow.

Hauling the dinghy on the rocks, I often waded along this half-submerged reef with Long John, Chief, or Bob, casting for fish or graining crayfish, and one day took a black grouper, also known as the jewfish,—not the typical beast of that name, which haunts the mud-holes of the upper reef, but a clean-cut gamy fish, living mainly in the open, and comparable to the great black sea bass of Southern California.

I had been casting for hogfish with a large bait when something took the hook and made a straight-away rush, and soon unreeled two hundred feet of line; and as I could not stop it I hailed Chief, who ran the dinghy out just in time for me to jump in and save my line, as he sculled after the game which he thought was a shark. I did not accept the shark theory, as I had a glimpse of a black ponderous something, at the time of the strike. It took us two hundred yards out into the channel, then swept around and charged the reef again; and on reaching shallow water swam down the barrier reef, where I played it nearly an hour, in and out, with all the work of a large tarpon, yet never seeing the game. At last I won,

and it came into sight, a black grouper, according to Chief. It was too large to take aboard, so Chief gaffed it and we beached it on the reef, from which we later towed it in. Not far from here various kinds of groupers were taken, from the big-mouthed red grouper, a deeper-water denizen, to the many smaller forms, especially designed for light tackle in "these gulfs enchanted."

As we rowed home one afternoon after one of these fishing days on the edge of the reef, we entered a blue *cul de sac* in a channel whose tint was a delight to the eye. I have crossed many waters, but do not recall a water so strangely blue, so intense and beautiful as this. I was gazing astern when I caught sight of a long rakish-looking fish following. Long John said it was a Bahamian barracuda, and that he would show me how curious it was, and how it could be fooled. Taking an oar, he began to scull the dinghy slowly, while by standing on the thwart I looked over his shoulder and took my lesson. He held the grain pole in his right hand across the stern, sculling with his left. The fish, at least six feet long, was evidently fascinated, and came within fifteen feet of the boat, shooting ahead now and then, first on one side, then on the other, all the time coming on in fitful dashes, showing its big black eyes, its savage lower jaw with its overhanging muscallonge-like lip. It was attracted by the peculiar movement of the oar, and later and often I succeeded in producing the

same effect with a white rag on a short line. The fish came within ten feet, then would turn broadside on, showing its entire length and silvery belly. John never moved, but stood more like a jury mast than ever, sculling slowly, until he had induced the big fish to come within eight feet of the boat, when he suddenly stopped, and as it shot along, displaying its entire length, he sent the grains flying into it. The fish sprang into the air, hurling the pole backward, dashing away with a force that soon exhausted the line, then towing the dinghy up the channel, stern first, to its end, then out over the reef, fighting fiercely for its life, and coming in only after a hard struggle on the part of my giant boatman.

All these men were skillful with the grains. I have seen Long John take a large barracuda by tossing the grains into the air, so that they would turn and drop on the victim. They took turtles in this manner, tossing the peg on the grains pole high into the air, where it would turn gracefully and drop upon the turtle's back fifteen feet distant, the entire movement being a picture of grace.

The pole was held vertically, the barb upward, the opposite end resting on the two first fingers, and with a motion seemingly inadequate, the grainer tossed it gracefully into the air. Up it would go, then turn like an arrow and drop with marvelous precision upon the game.

There was a fascination in graining large barracudas in the channel that claimed me as a willing victim, and to scull along trying to delude the game or coax it nearer and nearer, to watch its hesitation, its cleverness, its evident struggle between boldness and alarm, were so enticing, that I passed much time in the strange false channels which led to a No Man's Land, and which seemed to be the favorite resort of these big fishes. The big Bahamian barracuda had an evil name on the reef, and I met one man, named "Barracuda," who had been badly injured by one, the fish attacking him as would a savage shark. I often sculled my dinghy before a big barracuda merely to see how near I could induce it to come; and the vision of these long, slender fishes darting out of the gloom, now coming ahead or displaying themselves from the side, was one long to be remembered.

On my last day on the reef we sailed over to Northwest Key, an island by courtesy of the wind and current. It was unseen until we were nearly on it,—an atom of sand several miles north of Sand Key toward Loggerhead. I went ashore in the dinghy and found the key so small that I could almost jump across; yet some grasses had taken root, and in the centre was a single egg of a tern that probably had just time to hatch before the island was swept away.

Nowhere are the peculiar habits of certain ani-

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mals more distinctly marked. Bird and East keys were selected by terns for laying, arriving in vast numbers in May; but I never saw them in great numbers at Sand Key, Middle Key, or Loggerhead, though, of course, in the latter the light and keeper may have prevented; but the two islands mentioned were the favorites. I never turned a green turtle at Loggerhead, nor did I more than once find a loggerhead at East Key, while neither of these turtles came ashore at Middle, Sand, Bird, or Long keys. There may have been sporadic instances, but it was not the rule, and in circling these keys countless times I never found the trail of a turtle. It would be interesting to penetrate the inscrutable minds of these animals and ascertain their reason for selecting certain keys for their purpose.

CHAPTER XI

AMONG THE MAN-EATERS

Face to Face with a Large Shark. A Disagreeable Experience with Sharks. Facts about them. Sport of an Aggressive Character. Ways of Sharks. The Pilots. A Big Sawfish. A Captive Shark. Remoras.

THERE was hardly a day in the harbor near the key but one or more very large sharks were seen or hooked. A number of negro fishermen were in camp on Long Key, having run down from Key Largo. They were professional sharkers, and I gave them my catches. One day the government schooner came in and Captain Dave asked me to look at her bottom to see if she was foul enough to dry dock. The water was clear as crystal, and as I dived from the dock and swam downward I could see every object with remarkable distinctness. The keel amidships was reached in a few strokes; I grasped it with my left hand, and glancing along the hull, noticed that she had a growth of weed that was soft and velvet-like to the touch.

As I poised a few seconds before rising to the opposite side, something indefinite, vague, and big took shape astern. I seemed to see it by intuition:

first a shadow, then a blur, then a gray, dun-colored form, and then the sharp outline of one of the largest sharks I had ever seen. It came on so quickly, so easily, with the peculiar lateral swing of its tail, that I seemed to meet it face to face, though it was below me, and I saw it pass so near that I could almost touch its knife-like dorsal. Its details, outline, fins, tail, its peculiar movement, its colossal bulk, all seemed to be photographed upon my mind with singular distinctness.

It had but to rise a few feet: it was a man-eater; the game was there, but the shark was a coward. My breathing limit was a minute,—a long time under water, an eternity when holding the breath and watching the slow second hand of a watch. My head and shoulders were under the keel. A stroke carried me beyond, and placing my feet against it, I shot out and upward, the very bottom rising about me, an irruption of sand and mud, out of which I was hauled aboard, having been down less than three quarters of a minute. If I had made the appointment I could not have timed it better to meet this man-eater face to face. The shark did not see me until I moved; then, doubtless terrified at the strange white object, it had swung its ponderous tail, sweeping upward a veritable sand and mud cyclone cloud as it shot away and out into deeper water.

To the reader this experience may seem in a

sense startling, but it depends upon the point of view, and as I recall it the element of danger never really occurred to me, as sharks were so plentiful at this point that they were viewed by us with contempt. Hardly an hour of the day but one or more sharks ranging from eight to thirteen feet in length swam by, attracted by a turtle slaughter-house some distance off where they ate the rejectamenta of the local commissariat. So clear was the water that the sharks could be distinctly seen, and I had repeatedly dived down as one was passing, opening my eyes quickly to see the dun-colored shape melting away into the green. At times several swimmers would plunge downward, literally driving away sharks so large that a man would have been a fair meal for some of them.

These sharks were so-called man-eaters, *Carcarbini*, of extraordinary bulk; and my various experiences with them tend to show, at least in my estimation, that a shark is a coward when well fed, but when starving, possessed of demoniac and bloodthirsty persistency and brute courage. I frequently swam across the deep channel to Long Key, sometimes with a companion, sometimes alone, and when midway have seen the dorsal fin of a shark up the channel; and doubtless numbers of sharks swam beneath me *en route*. Once a large shark came so near in mid-channel that my companion suggested that we frighten it;

so we performed what the boys called the "steam-boat act," striking the water violently with hands and feet. But I recall that we made the remainder of the swim overhand, that is, as rapidly as possible, and some one who had been watching sent a boat over to bring us back, not liking the size of that particular shark. Still the question of actual danger from sharks was never seriously considered here; it was the belief that if a man kept moving a shark would not touch him. I doubt, however, if there was a single swimmer who would have gone overboard in the outer channel, half a mile distant, known to be a sharks' highway, and where the big and hungry man-eaters came in from the outer gulf. This may have been merely prejudice,—I at least never tested the correctness of the theory.

The region was a growing atoll,—a central series of coral keys or islands capping submarine mountains, with outlying fringing reefs nearly bare at low water, cut by meandering turquoise-blue arteries, or channels, which formed highways for the large sharks which came in, and I learned swam out, particularly at night, upon the shallows in search of prey of various kinds. There were several varieties; among them the big white shark, the true man-eater, which I would see sailing along just beyond the breaking sea of the fringing reef, hunting possibly for the one channel available at high tide and called the "five foot."

from its narrowness and its shallowness when the tide was at the ebb. There was a legend along the reef that a boat had been capsized here and the crew eaten by a band of starved man-eaters, but I never could trace it to any one who had witnessed the tragedy. Yet the men, all brave wreckers, were extremely afraid of the approach to this runway through the dead coral rock, into which I had been thrown before a black squall.

Where sharks were so common it may be assumed that the sport of catching them was attempted, and I tried conclusions with them in various ways, the negro fishermen in the vicinity taking the livers, backbones and jaws, which were employed in trade. The extraordinary bulk of these sharks, some being as large around as a horse, made special tackle imperative, and my outfit, which Long John made, consisted of three hundred feet of fine Manilla rope about the size of an ordinary clothesline, three feet of stout chain, and a swivel steel hook four inches across with a shank seven inches in length. Sharks being scavengers, any bait was acceptable, but fish bait—a ten or twelve-pound grouper—was the best, and a shark could scent such a *bonne bouche* a long distance and trail it up. Sharks have a marvelous scent and can follow up a ship like a hound and in a way that mystifies sailors and laymen alike.

There is a knack in shark-fishing as in every-

thing else, and I have brought to beach or boat a shark so large that twenty men were required to haul it upon the sands. The secret is to have an abundance of line and to fight the shark continually, as when you are resting, it is recovering strength. My general plan was to fish from a beach, where I could cast my line into the deep channel, the end of the line being fastened to a heavy stake. But once in fishing from the wharf I passed the rope through an open sentry box, and made it fast to a heavy plank. When I hooked the shark, I was nearly pulled over. It carried away all the line, which could not be picked up, and when the end came, the sentry had barely time to leap from the box when the latter and plank went overboard, the line soon breaking. Such a shark must have been sixteen feet or more in length.

The ferocity of sharks is not a pleasant subject for contemplation, yet there is a certain fascination about it. I wished to observe sharks in their native haunts, see how they attacked prey, and form some estimate of their strength, so I conducted many of my observations at the point of a coral reef that projected sharply into a blue channel of unknown depth. The coral, the ordinary branch variety, came to within three feet of the surface, and by thrusting a coral hook into it I could hold the boat and cast it off at a moment's notice. Arriving at this point in the morning, not a shark would be seen. A bunch of fish was now hung

overboard, and a bucket of blood poured slowly over into the glass-like water, when it was carried up the channel by the current. It was rarely that I waited over ten minutes; then down the line a triangular fin would come cutting the smooth water, advancing in a series of tacks. The shark had found the scent, and in hunting for the prime cause, it swam rapidly across the trail of blood, turning at once when it lost it. It was remarkable how rapidly a shark would beat up, and find the boat by following this line of blood and fish oil. By the time the shark reached me others were coming, and their rapid and suggestive movements, as they approached, were not a pleasant spectacle. In an hour I have "conjured up" from the deep twenty sharks that I could see, and doubtless others that remained below the surface, — a trick of the very large ones. Reaching the boat, they invariably sheered off slightly, and passed me, tipped up sufficiently to bring the small, hideous, gray eye to bear on the boat, then swimming away to swing around and repeat the investigation. To glance down into the clear water and see perhaps a dozen monsters in dun of various shades, passing and repassing like spirits, was suggestive of what might happen if some one fell overboard. I had an amiable black servant who had such an aversion for sharks that at such a spectacle he would bury his face in his hands and beg to be taken in, and when he was

jokingly asked to dive over in the interest of science to see what would happen, he almost lost his head ; he was utterly lacking in appreciation of humor of this kind.

Whether these monsters would have attacked a man is a question. Some were thirteen or fourteen feet in length ; long and lithe, and barred with black stripes, these being known as tiger sharks. Others were very light or blue, and all shades of gray to brown. One day a steer was accidentally drowned, and I had my men tow it out and fasten it to my boat by a line some twelve or fifteen feet in length, in order that I might observe the attack at short range ; then several buckets of blood were poured over, and we sat down to wait for the coming of these wolves of the sea. In an inconceivably short time ten or more man-eaters could be seen several hundred feet distant on the surface, darting here and there like hounds, and they quickly reached the feast. The first one that came by sheered off so suddenly that the water boiled, as though a volcano had burst forth beneath the sea. The unusual sight of a red-haired non-descript half out of water had alarmed the shark, but it was only for a moment. It turned quickly, came down by me not three feet from the surface, examined the steer again, bore away, then turned and came directly for it on the surface, and instead of turning on its side after the approved fashion of books, it thrust its head partly out of water and

seized the animal, and with a vigorous side swing endeavored to carry it down.

This was impossible, and the shark shook the animal, as a dog would a rat, tearing off a great piece and towing the stern of our boat out into the channel. In a few moments we were surrounded by sharks, and the saturnalia began. They attacked the floating animal by twos and threes, dragging it down out of sight, then, losing it, would charge again, some more ravenous than the rest darting at it with such velocity that they overshot it, turning quickly. As I watched this struggle, out of the blue depths rose a form so gigantic that I will not attempt to estimate the size of the brute; but the other sharks fell away before it like jackals before a lion. It seized the portions of the animal that remained, and with a single wrench tore it from the fastening and disappeared. Our boat was eighteen feet in length, and the shark appeared to be longer than the boat. I may easily have been mistaken, as I confess to some excitement; one can hardly contemplate such a scene of carnage with complacency and good judgment.

All these sharks had remoras, or sucking fishes, attached to them or swimming alongside, and little schools of striped pilot fishes at the head, and I had an excellent opportunity to disprove the popular illusion that the shark is led on by the pilot. The little fishes have a habit, similar to that of many of the mackerel-like fishes, of taking up with large ani-

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mals. All the large jelly-fishes here have small fishes up under the lobes, seeking protection among the death-dealing lassos. I have seen them repeatedly dart out in the direction of food, but it was a personal motive ; they fed upon the crumbs from their protector's table. The remoras merely used the shark as a medium of transportation. When tired they attached their sucker-like disk to the rough skin and allowed the man-eater to tow them, the dark, slender forms being very conspicuous.

Usually I could stop the rush of a shark before it had taken two hundred feet of rope when hooked, but this day the entire coil was taken so quickly that we could but lie down to render the boat more stable, I near the bow with a knife, ready to cut, as we took no chances, and my companion in the stern with an oar, to steer. I fully expected that this shark would jerk the bow of the boat under water, and more than once was about to cut the line as we flew along dangerously low and at a pace that was suggestive of the size of the game.

After a run of half a mile we tried to take in the line, but the shark merely turned ; it was impossible to move it, and had I not seen a twelve-oared barge of the health officer coming I should have cut away, as the shark would have taken us to sea. I hailed the barge, and took their line and made fast. For a moment the unseen monster towed the twelve men against their oars, and then — the line broke. It is impossible to estimate the weight or

size of such a shark. Doubtless they look larger in the water than they really are, but numbers of sharks of the largest size have been taken and some data for comparison have been obtained. A specimen of the true man-eater, *Carcharodon rondeletii*, has been caught forty feet in length, as large as some whales. Another specimen, taken in Australian waters, measured thirty-six and a half feet in length. This monster had devoured a horse that had been thrown overboard. Its teeth measured one and three quarters inches high and two and a half inches wide. Such an animal is the type of everything ferocious. Shark teeth have been dredged from the bottom of the Pacific between Polynesia and Chili that measured four inches in height and five in length. The average shark might have thirty such teeth, varying in size, in its front row, and twelve rows. It does not require much calculation to estimate that such a man-eater may have had a mouth eight or ten feet across. If this is true, a horse would be swallowed in a few bites. In the American Museum of Natural History, New York, are some remarkably large shark teeth taken from the Tertiary deposits of Charleston, South Carolina, telling the story of an extinct man-eater. I had the curiosity to arrange a set of these into a jaw, using a large jaw of a modern *Carcharodon* as a model, and my estimate gave a shark which might have been from one hundred to one hundred and twenty-five feet in length. Such man-

eaters lived in countless numbers in comparatively modern times, and swam over what is now the coast line of Southern California among other places.

The ground shark, *Somniosus microcephalus*, attains a length of twenty feet, and is one of the most ferocious and bloodthirsty of its kind. Dozens have been seen about a whale, refusing to leave when pierced through and through by the lances of whalers. Scoresby is authority for the statement that it is absolutely fearless. I have tried conclusions with a specimen eight or nine feet long off the Maine coast, and found that it paid no attention to cod hooks, taking them, one after the other, with the fish being hauled up. The bulk of these sharks of the largest kinds can be imagined when it is known that the largest weigh over four thousand pounds, or two tons. In the British Museum can be seen the jaw of a man-eater which measured over thirty feet in length; and a Pacific coast shark, killed at Soquel, which measured thirty feet, had just swallowed entire a one hundred pound sea lion.

One morning I hooked a very large shark, which despite my efforts ran out the entire line, and as our dinghy started I cast my eye over the side and saw at least six tiger sharks following. They were about five feet below the surface, and kept with us until I had the big game in hand. This shark made desperate attempts to capsize the boat. It towed us in a circle completely around

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the island, about two miles, and was so erratic in its movements that had there not been a notch in the bow in which I kept the rope, I believe it would have succeeded. One of its sudden turns jerked the boat around so suddenly that she nearly filled. At this moment I had hauled the boat up to within fifty feet of the shark, and was lying back holding on. It would dart around in a circle, then come at us suddenly, then rush away at full speed. At the end of two hours it had fought us to a point where we were almost exhausted, the terrific heat not being conducive to such activity; but we held on (there were two of us) and gradually gained until I brought the shark to the surface and ran the dinghy over it, secured the chain holding the monster at short range while it rolled and struggled in desperate attempts to sound. One swing of its tail struck the dinghy a blow that would have killed a man; then, finding itself in the toils it turned savagely, opened its cavernous mouth, and seizing the cutwater, surging upward, actually lifted the bow of the boat out of water several feet, leaving a number of its serrated teeth in the wood. I beat it off with a boat-hook, then passed the line aft, and held it with a single turn, not considering it safe to make the line fast, while Chief rowed.

Several times the monster turned and attempted to seize the keel, but I beat it off with the oaken stump of an oar. So vicious were its attacks, like

the snapping of a coyote, that fearing it might bite a hole in the cedar boat, or crush the planking, I thrust the oar between its jaws, which fastened over it, and the shark was towed inshore gripping the hard oak wood. An hour later a boat reached us and the shark was slowly subdued. So enormous was the bulk of this shark that I decided to keep it to see if it could be tamed. We towed it to the key, where there was a moat or ditch, a water corral, about half a mile in length, by fifty feet wide, and six feet deep, in which turtles were kept. It took thirty men to haul the big creature through the tide gate, where the shark rallied and rushed through them, creating a momentary panic; but I soon had it headed for the opening, and the men hauled it up the slight grade, and sitting on its back I cut out the hook and got safely away from its flail-like tail as it rolled into its prison, probably the largest man-eater ever placed in confinement, though not the last I experimented with.

It dashed down the moat at full speed once or twice, then apparently accepted the inevitable. This shark lived three or four months, then died of starvation. It was fed regularly, but never was seen to eat, though tempted with various kinds of food. The jaw when taken out would slip over my head and shoulders. It contained thirteen rows of triangular teeth, each serrated, or with a saw-like edge. The outer row stands erect, and

is the armament seen when the shark's mouth is forced open; but when the animal seizes its prey, or bites, all thirteen rows spring upward like so many knives, explaining the ease with which sharks dismember their prey.

The very appearance of the shark is conducive to terror. Its colossal shape, its small, gray eyes, its peculiar houndlike movements, its vivid white belly, its slit-like mouth are features unpleasant to contemplate; and when such a shark persistently dogs a boat and seizes its prey almost from your hands it is a menace indeed.

One of the large sharks which I took here was the so-called blue shark, *Carcharhinus glaucus*; a ferocious creature, and from the standpoint of game one of the most active. This shark and its many allies or species, thirty or forty in number, is perhaps the most familiar, specimens from twelve to fifteen feet being common, while a length of nearly thirty feet is attained by it. Many large sharks appear to lose the sense of pain. I once observed a blue shark attempt to seize a large jewfish which had been hauled alongside, the monster taking it by the side, biting out a huge piece, receiving a terrific blow on the head from a sheath-like knife lashed to a pole which Chief used as a lance.

The blade must have passed through the shark's head, yet it returned to the attack to receive another blow in the side, seizing the fish again while

its entrails exuded from the wound. I could see its small eyes turn upward when the blows were struck — the only evidence of pain it displayed. It finally made off with at least one third of the jewfish, to meet its fate at the hands of its fellows. Such a shark is the embodiment of brute force and ferocity. The so-called tiger sharks that I saw here were very active, long and slender. An old wrecker informed me that in the early sixties he was on a sponging trip up near Tampa when a huge tiger shark leaped out of the water and caught a man as he was climbing up a rope from the water.

How large the white shark, *Carcharias vulgaris*, grows is not known. These sharks inhabit the open ocean, are ship followers, rarely coming in-shore.

It may be conceded that the shark is malevolent and bloodthirsty, yet the actual instances where men have been taken are few compared to losses of life by attacks from other animals, as snakes, which in India kill twenty thousand persons annually. Few landsmen, doubtless, have had a wider experience with sharks than myself, yet I can recall but two instances which I can give from personal knowledge where a man has been killed by a shark, though the records of Cuba, Vera Cruz, Aspinwall, and other ports could doubtless be drawn upon and would afford gruesome instances. A member of a family which I know was fishing from a schooner off the New Eng-

land coast with a party of friends, and the fish not biting, he got into a dory and rowed away some two hundred feet to try his luck in a different spot. In a short time he was heard to scream, and the party saw him strike at something with an oar while shouting for help. Then they saw a gigantic shark rise out of the water, fall on the dory, seizing the man as it went down. There were twenty witnesses to this tragedy. It was believed that this large white shark was the same one that terrorized the fishermen of the Maine coast about that period.

A friend stated that such a shark attacked his father's dory and nearly capsized it, so that he was forced to row inshore to escape; and the shark was known all along shore as the "big shark." An acquaintance in the government service told me that when lying off the rock of Gibraltar some years ago the crew went in swimming from the ship, a man being stationed in the foretop to look out for sharks. One venturesome fellow swam away, and the lookout, seeing a shark approaching, called to him to come back. The men sprang into a boat and pulled for him, my acquaintance being in the bow with a boat-hook. They had almost reached the swimmer, shouting words of encouragement, when the enormous man-eater, described as being as large as the cutter, shot ahead and literally bit the man in half, carrying him off before their eyes.

All the men here profess to be afraid of sharks,

but Chief will join me in a swim across the channel at any time when he knows that sharks are about; familiarity breeds contempt. I am convinced that the sharks of the inner harbor, at least, are afraid of a white swimmer. Had this been otherwise, some of us would have been taken long ago, as I am constantly in the water. When the heat becomes unbearable I go overboard, this being repeated several times a day.

One night, when sitting on the south beach with the men watching a shark line, the conversation turned on the negro. It happened I was in Key West some years before when a slaver was brought into port, and the miserable creatures were taken from the hold, where they had been herded like sheep, driven ashore and placed in a high-fenced corral, called a barracoon, on the south beach. This led Long John to say that he had no use for niggers. "Yere's a piece of poetry that fits my ideas clean down to the bone," he said; and taking out a grimy envelope, he opened it and extracted a piece of paper, then leaning over the dull lanthorn, read the following:—

We are taxed for our clothes,
Our meat, and our bread,
On our baskets and dishes,
Our table and bed.
On our tea, on our coffee,
On fuel and lights,
And we are taxed so severely
We can't sleep o' nights.

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And it's all for the nigger!
Great God! can that be,
In the land of the brave,
And the home of the free!

We are stamped on our mortgages,
Checks, notes, and bills,
On our deeds, on our contracts,
And on our last wills!
And the star-spangled banner
In mourning doth wave
O'er the wealth of the nation,
Turned into the grave.

And it's all for the nigger, *etc.*

We are taxed on our office,
On our stores, and our shops,
On our stoves, on our barrels,
Our brooms, and our mops,
On our horses and cattle,
And if we should die,
We are taxed for our coffin,
In which we must lie!

And it's all for the nigger, *etc.*

We are taxed on all goods
By kind Providence given.
We are taxed for the Bible,
Which points us to Heaven.
And when we ascend
To the heavenly goal,
They would, if they could,
Stick a stamp on our soul!

And it's all for the nigger, *etc.*

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I was interested to know where Long John got the poem and who wrote it, and learned that it had been given to him by an officer¹ stationed at Fort Jefferson. Perhaps some reader of this Log may recognize the poem and be able to trace the real author, as Long John did not,—like the multitudinous authors of “Beautiful Snow,” claim it as his own.

¹ The officer referred to was my father, the late Dr. J. B. Holder, Curator of Invertebrate Zoölogy at the Museum of Natural History, New York, who during the Civil War was surgeon and health officer at Fort Jefferson. On a trip to the mainland with a party of surveyors for the first Key West cable, he was entertained in camp by some of the Federal troops, and one of the officers gave him a copy of the poem, which he stated had been found on a Confederate prisoner recently captured.

CHAPTER XII

DIVING IN THE CORAL CITY

Diving in Coral Lanes. Down the Face of a Coral Cliff. Growth of Coral. Difference in Deep and Shallow Water. Various Kinds of Corals. Gigantic Heads. Habitants of the Coral Groves.

ONE of the delights of life on the keys was the diving and swimming excursions I made through the great madreporean coral forest that covered acres in this growing reef.

The water was warm, and to plunge down and swim along the bottom had a peculiar fascination to me, and nearly all my trophies of shell or coral I took from the bottom during these submarine excursions. By habitual diving and remaining under water I became able to hold my breath over sixty seconds, Long John or Bob poling the boat or following me. In a minute a fast swimmer can cover many feet, especially beneath the water, and early in my life here I determined to see the reef below, as well as from the surface, probe into its nooks and corners, and know it by actual contact.

As I lowered myself from the dinghy one morning, my object was to examine the coral that had

taken possession of all the central and southern portion of the lagoon, covering several miles, in water from five to ten feet in depth in the lagoon, then reaching down precipitously into a channel of unknown depth. From the surface or boat, the submarine landscape presented many attractions. The water was extremely warm, the terrific heat seemingly consuming the breeze, so that the surface was a perfect mirror, sea and sky almost blending. As far as the eye could reach the living forest of coral stretched away, and being interspersed with lanes, streets, and avenues of pure white sand, it presented a variegated aspect of white and olive, which the deep blue of the neighboring channel seemed to intensify.

The opening or lead which I entered, as I swam down, was a perfect miniature street, and by swimming along near the bottom I found that I could see distinctly, especially the dinghy and Chief, who followed me along, grains or spear in hand, in case some over-curious shark should object to the intrusion. The roadway was of pure white sand of disintegrated coral and a lime-secreting alga, and from it on either side rose the rich *chevaux de frize* of the madreporean forest, reaching a height of two or three feet; a compact mass of branches of olive hue, bespangled with white tips here and there, where some worm had killed the polyps. The water was so clear that I could distinctly see minute forms of jelly-fishes, the meteors of the sea,

whose graceful tentacles, like comets' tails, stood out against the coral.

As I swam slowly along I caught a glimpse of the life of this submarine city. Before me passed many small brilliantly colored fishes, that came out of the mass of coral, eying me curiously a moment, then darting away. Angel fishes with plume-like fins, and gorgeous coloring of blue and yellow, were particularly tame. Many seemed to be resting among the branches of the coral, carrying out the idea of the birds of the sea, and did not move as I passed, only the vibration of their caudal and lateral fins telling that they were alive. Others dashed from their retreats in sudden alarm and scurried away. In mid-street, lumbering along, was a huge conch (*Strombus*), and as I turned it over, I found that the legal owner had been ousted by a large red-clawed hermit crab whose corrugated ornaments presented a strange contrast, not inharmonious, to the delicate pink of the shell.

By repeatedly diving I followed the base of the coral along this street for several hundred feet. Everywhere the coral was of the same height, a forest alive with strange animals. All along the edges the base of the coral had been undermined by crayfish, whose serrated whips waved to and fro excitedly as I moved along.

In the interstices I caught glimpses of black echini as large as a closed hand, with spines six

inches in length; others were white with short spines. Here, clinging to the branches, was a star-fish that might have been a medusa's head with its writhing snake-like hair, as the arms of this strange creature were bifurcated to an extraordinary degree, so that they resembled a mass of coiled snakes, which in a specimen carried to the surface fell apart in a rain of disconnected pieces. The coral lane gradually turned, forming a half circle, and had many lateral branches, so that it was possible to swim through it in many directions; and finally it pitched over the side of a blind channel, or *cul de sac*, and gradually became lost.

The channel was a peculiar feature of the reef, and was undoubtedly due to the action of some erratic current in the past, that had eaten into the shallow lagoon, cutting out a large ditch or bay several hundred feet in width, as many yards in length, and at least one hundred and fifty feet deep. The water was an intense mazarine blue, and the edges of the channel were so precipitous that I could stand among coral branches and look down into blue water. In other words, the street through the zoophyte city came to a sudden end, like the thoroughfare of a great city which led to the docks and left the stroller facing the deep sea.

I was curious to learn whether the maze of coral branches changed in size as it dipped into deeper water, and determined to reach as near the bottom as possible and make what observations I

could during the ascent. In pursuance of this plan Chief lowered over a heavy coral rock which we took from the barrier reef, to which he fastened a rope loop. Seizing this I gave the word, and the next second was being dragged rapidly downward head first. The upper five feet of the water were very warm, but then came a cooler stratum, and then I entered an area seemingly as cold as ice by the contrast. I had no means of ascertaining the distance, but I dropped the stone when increasing darkness suggested a greater depth than I had ever attempted. Judging by the temperature and time consumed in swimming up to the surface, I assumed that I had reached a depth of thirty, possibly forty feet. This was, however, pure guess-work, but I was more than repaid for the effort.

As I turned upward I was confronted by an almost perpendicular wall of madreporic coral that pitched over the side of the channel, apparently falling a zoöphytic cascade, in all probability one hundred feet in height. My observations were made while swimming rapidly upward, as even by long training I could not hold my breath much over one minute, but in those few seconds I saw that the branches of coral were much longer than those in the shallow water and gave evidence of greater development than those of the lagoon above. Some resembled the horns of the elk, bending outward in graceful lines from four to six feet,

the mass presenting a solid front of serrated points, a wall of coral life, a bayoneted army of polyps of great beauty. As the branches did not grow so close as in the lagoon, I could see into the heart of the forest, where richly colored fishes floated, eying my rising figure with probable amazement and consternation. The impression of this ocean landscape, the majestic wall of bristling points fading away in the distance, the delicate green tint of the water, the strange beauty of it all came as a realization of that region of romance, of

. . . gulfs enchanted, where the Siren sings,
And coral reefs lie bare;

but the only sirens here were the gorgeous parrot and angel fishes that floated in and out of the interstices of the submarine forest.

My observations demonstrated that the branch coral in ten and fifty feet of water varied greatly in size. The polyps in deep water on the face of the channel were much more vigorous, owing to the greater food supply. Later, by using iron hooks, some fine specimens of the channel growth were taken up, and by careful dredging and sounding I found that the coral growth ceased at the bottom of the incline, or did not spread out upon the floor of the channel one hundred feet down.

In these fleeting glances little could be seen, but by making a series of dives with the stone and by dropping off at different levels, the method

used by the East Indian pearl divers, a fairly correct picture of the great coral wall was obtained. Descending again about thirty feet, I swam along its face within arm's reach, and, glancing up and down, could see the polyps on the long branches and catch fleeting glimpses of fish of varied hues ; but the strongest impression made upon me was of the mighty fall of the coral points that appeared to have suddenly frozen or crystallized into yellow and brown or olive-tinted icicles.

In excursions along this wall near the surface, I could grasp a branch, peer into the very heart of the coral mass, and it was interesting to note the effect of my appearance upon the various finny denizens of the place. Some dashed away affrighted ; others appeared fascinated by the strange apparition and stared at me curiously as I passed. Some swam directly toward me, while many minute fishes evidently took me for a harmless intruder and passed me by.

By combining the observations made during these brief visits, it was evident that the idea of a coral city was not merely a figure of the imagination ; that the coral mass not only represented a vast assemblage of individual polyps, bound by the closest ties, but the branches were the homes of many animals that at times ventured freely into the open streets and wandered about at will. That this was true, I found by quietly drifting over the coral at night during the full moon, when the

white streets stood out in strong relief. Looking down, I could plainly see the night prowlers. The crayfishes were out in force,— their principal feeding time being at night. Here a fugitive band of mullets swam quietly along, safe from the predatory barracuda that lurked in the adjacent channel. There a big moray, a vicious sea eel, wriggled across the aquatic promenade, its black snake-like shape sharply outlined against the bottom. Bands of angel and parrot fishes consorted in friendly groups, swimming slowly up and down, and occasionally a black, bird-like ray moved along in search of prey.

If the moonlight nights of this pseudo city of the sea were beautiful, what can be said of those when darkness reigned? The sun would go down in a blaze of vermillion light, leaving the water smooth and hot, and as soon as darkness came the carnival began, and the coral city was ablaze with the scintillation of lights. As I peered down into the depths the sides of the roadway I had passed so many times were sharply outlined by mimic flashes. Floating in mid-water were luminous cloud-like masses, the tentacular and luminous portions of some jelly-fish. Every furtive motion in the depths left its train of fire; every fish that moved seemed to have the power of igniting the water, and the streets of the coral city were illumined with their own lights. In the sand a point of yellow light would appear, spreading and radiat-

ing rapidly with fiery pulsations, until presently it became as large as a saucer, then decreasing slowly, as, balloon like, it rose to the surface. Here another light, a rich blue, was darting about; when caught in the net these atoms glowed like coals and became insignificant worms, but they were among the most brilliant light-givers.

On such a night on the great reef the sounds had a weird attraction, for me at least. There was the muffled roar of the waves that a mile or so away were pounding on the reef or eastern edge of the atoll, the grinding of the dead coral rocks producing a mournful dirge. Now came the cry of some belated gull returning from the sea, then a deep booming sound as some giant ray or shark fell back upon the water after its ineffectual leap.

To become better acquainted with the wayfarers of the coral street I devised coral-hooks by which large masses were torn forcibly from their bed. It was only necessary to pick up the inhabitants, as they deserted their homes in the interstices of the coral, a strange host, crawling, leaping, and jumping with wonderful intuition toward the water. There were curious Ophiurians, whose arms resembled snakes, mottled octopi, over whose backs raced varied tints and hues, and in whose trail often followed clouds of ink. Among the branches clung monster worms that had been preying upon the coral polyps hauled over the tips like gloves. Here were black echini, their long needle-like

tentacles moving to and fro ; crabs of red and blue tints ; others that mimic the weed or gems ; big cypræas now throwing off the fleshy covering and exposing the gleaming shell. Others were here that could not escape,—delicate fan shells that had been caught by the growing coral and were prisoners for life, the parasitic and burrowing worms, and the delicate polyps themselves, now withdrawn tightly within their cells.

While there were many different kinds of coral here, which chose certain locations, there were three noticeable forms : the madrepore, or branch coral (*Madrepora cervicornis*), which covered acres ; the palmated, or leaf coral (*M. palmata*), found just within or beyond the breakers, and the great individual groups and heads of astræas and mæandrinas, generally seen near the edges of the little false blue channels which cut into the white, sandy lagoon like veins, or arteries of turquoise. One group I decided to raise and send north, but they still rest in the lagoon, the most powerful tackle Chief, Bob, and Long John could devise failing to move this single coral head. I came upon it one day wholly by accident as we rowed along the edge of the north channel. There were a dozen or more straggling heads ; one, an ancient specimen, had been hollowed out until it was a veritable living vase, the exterior alive with polyps and dotted here and there with the flower-like tentacles of a boring parasite, so that the surface seemed studded with brilliant asters

that disappeared at the slightest jar in the boat. We anchored by the side of the monster, and diving down and holding the rope I found the coral vase was nearly four feet high and twice the distance across. Looking down I saw that it was a perfect aquarium. Crayfish had undermined it and lived with various morays in the basement; sea fans, plumes, and gorgonias occupied the exterior, where scores of angel fishes swam about with porcupine and cowfishes, the gray snapper, and many more. Other heads of this group were almost equally large and perfect, and when first seen fairly blossomed with the flower-like coronas of boring parasites. These were the giants of coralline life and doubtless weighed over a ton,—remarkable and striking objects on the great plain of the reef.

The general plan of the reef was a large irregular circle comprising eight islands above water, away from which reached masses of coral of the greatest beauty and variety. The central key was completely surrounded by a deep channel, that like a blue serpent cut into the reef and wound in and out, now advancing into the shallow lagoon, forming a deep *cul-de-sac*, ending abruptly, or finding its way completely through the lagoon, again entered the gulf. The atoll-like character was particularly pronounced to the east, where for a mile or more the sea broke furiously against the shallow barrier of fringe and had thrown up a long,

narrow ridge of dead coral rock that at low tide was bare. One end of this had assumed the dignity of an island and supported several mangrove trees which fought for life in the slender holding. Once over this barrier the lagoon, with shallow, sandy bottom, spread away, covered by coral or algæ or entirely bare, the roaming ground of the conch and crayfish.

If this inclosed region was attractive, what can be said of the seaward side of the reef! Here the water deepened quickly, so that one hundred feet from the barrier there were fifty feet of water. This was an ideal garden of the sea, and the fascination of diving down into it, swimming by the sea fans and plumes in its shallower parts, past great palmate masses of coral, through regions where bright colors produced strange harmony, cannot well be described. A decided swell came in here on the calmest days, but there were times when the surface of the gulf was as smooth as glass, when the fairy-like physalia lifted its sail in vain, when the velella drifted with the tide and was beached in the shallows. On such days I often dived from the boat as Chief sculled me along, and swam down into this tropical submarine garden. Every foot of space was taken up. Scattered about were round, undulating heads of mæandrinæ; here were patches of leaf coral, the great leaves resembling the horns of the elk; brilliantly colored weeds filled every nook and corner, and

above them as far as the eye could reach, from above or below, were the resplendent plumes of the sea, the gold, lavender, and black gorgonias. Some were like great palm-leaf fans, rich in old rose tints, others bathed in tones of royal yellow. Here were plume-like forms three feet in height, of a deep purple, which waved in the gentle movement of the ground swell, and huge masses of sponge, Neptune's vases, while smaller sponges in red, yellow, and brown covered the dead coral rock.

For several miles this garden extended without a break, and on the sea sides of the growing atoll was reproduced in larger types. Here was the highway of myriads of creatures, from the great white shark, and bat-like manta that in schools swam along with other strange forms, to the quaint antennarius, cradled at the surface in its nest of sargassum, bound together after the fashion of that of the oriole.

The history of this coral reef is briefly told. Ages ago a submarine hill or mountain marked the spot, formed by the deposition of various forms, diatoms, shells, and rhizopods; the mountain gradually entered the coralline zone; then the floating coral polyp eggs grew and flourished, and died down, the solid mass being continually added to, until finally in ages it reached the surface; currents cut it up; waves threw up barriers of dead coral, and deposits of fine sediment formed in

quiet water. Upon this reef,¹ when it reached the surface, drifted mangrove and other weeds that were being carried around in the ceaseless flow of the Gulf Stream; and so the island, the key,² was born and populated, the mangroves were laden with pelican nests, and on the sands the eggs of gulls, the sand crab, and others deposited.

I once saw the infancy, if not the birth, of such an island; it was not twenty feet in length, but in the centre some long, yellow grasses were growing which lashed the sand into fantastic figures. Along the little beach were the dainty tracks of a sea bird, and on the summit a single egg, showing how quickly this new-born island, that was later swept away by a hurricane, was occupied.

* I learn with deep sorrow that this splendid coral reef is no more, — that the great coralline streets and lanes I often swam down during a five or six years' residence on the reef have been destroyed. My informant states that either a cold wave or the escape of sulphur or some noxious gas after an earthquake — or something — killed all, or nearly all, the coral in this vicinity. That it will grow again is unquestioned; but many years will be required to reproduce the reef I have described and knew so well.
— C. F. H.

² Cáyo.

CHAPTER XIII

CAMP AT SAN CLEMENTE

The Channel Islands. Whitefish. The Yellowtail. Rod Fishing off the Kelp Beds. Ancient Implements. Shell Mounds. The Sand Dunes. Ideal Fishing-Grounds.

AMONG the islands that are strung along the coast of Southern California, a chalice of emeralds in settings of silver, the sea angler finds a rare and new field for strenuous and manly sport. They are isles of summer, bathed in seas of eternal spring, and in their peculiar climatic conditions lies the secret of their many attractions.

The islands, beginning with the Coronados, the "Desert Isles" of Viscaino, and including San Clemente, Santa Catalina, San Nicolas, Santa Cruz, Santa Rosa, San Miguel, and Anacapa, lie in a general way parallel to the coast, from eighteen to eighty miles from it; the offshore tops of a second Coast Range which appears to have wandered out to sea, the crests or islands lying on the ocean like huge animals *couchant*. They are all swept by the Black Current of Japan or Kuro-shiwo, the Asiatic Gulf Stream which sweeps up that coast, crossing to America and turning to the

south, bearing a perennial summer upon its crest. The result, so far as the islands are concerned, is to produce a winter of verdure, the moderate rains of fifteen or twenty inches giving them green slopes, wild flowers, a climate like Madeira without its heat. In the summer come cool and constant breezes from the west, and the angler finds delightful weather in a land where the palm and banana give a tropical aspect to nature.

I am loyal to old fishing-grounds in Florida, but the summers are impossible from a standpoint of real comfort, while in Southern California the field of the angler is more comfortable than in many localities with which I am familiar on the northern Atlantic coast. Climate alone does not make fishing, but when a remarkable list of very large and gamy fishes is added the conditions may be said to be complete.

I believe it was in 1886 that I landed first at Santa Catalina; and when I saw men catching fishes from the beach, which tipped the scales at from twenty-five to forty pounds,—fishes, which broke big cod lines and played with lusty men ten or fifteen minutes before expressing a willingness to be caught,—I came to the conclusion that I had discovered a sort of sea-angling paradise, and forthwith sent for my rod, which I think was the first to bend in these quiet bays. The mainland coast of California is remarkable for its lack of bays, coves, or harbors. From San Francisco

to San Diego the real protected harbors are but two, San Pedro and San Diego; all the rest are more or less open roadsteads, and even San Pedro is protected by a long jetty.

The coast line consists in the main of sea-swept beaches, with rocky points here and there, but few if any coves similar to those of the Atlantic coast. Against this shore line the Western ocean breaks and rolls, and as a result comparatively few large fishes venture along shore except where deep water comes in.

The islands, which range about twenty miles in length by seven in width, lie almost parallel to the coast, Santa Catalina's north end being but eighteen miles from the mainland, and the run from San Pedro to Avalon on the south end but thirty miles. San Clemente is forty miles offshore, and the Santa Barbara Islands are about twenty. The former has a lee, and portions of its northern and eastern sides abound in bays and coves formed by the canions which wind down to the ocean from the island mountains. Off Santa Catalina there are about twenty miles of placid water, often so smooth that the angler might imagine that he was on some inland lake. These offshore bays and waters constitute the feeding and spawning ground for a remarkable series of big game fishes which in their season afford the angler a variety of sport. All the islands but one are private property or government land, and permission must

be obtained to visit them. This one, Santa Catalina, has a town and daily connecting steamers; consequently, it is the outfitting centre for yachting and fishing parties.

There are few places where the skipper can guarantee that in a cruise to last from the first of June to the first of October there will not be a squall or gale, rain, or a typical thunderstorm; yet this is the guarantee our skipper gave us as we left San Pedro one June morning, headed due south down the Santa Catalina Channel. Our vessel was a fine seventy-ton power schooner yacht, desirable among these islands on account of the possibility of calms in midsummer in the lee of the islands. We ran into Avalon, a miniature bay of Naples, took aboard three boatmen, their well-equipped launches in tow, and bore away for San Clemente, twenty miles further out to sea, reaching it by four o'clock in the afternoon over quiet water.

San Clemente has much the general appearance of Santa Catalina, but is lower, and has no good coves or harbors. We ran into Gallegher's, a harbor by courtesy, and rounded to near the rocky shore, anchoring just outside the kelp bed, sheltered by a rocky point. The tenting outfit for camp was in the boats, and was soon taken ashore, tents being pitched on a little plateau near the water. There was no rain to come, so no rain sheds were built. There were no mosquitoes, black flies,

punkies, known to us on other fishing grounds, hence the tents were open and the outfit simplified in many ways. The tents were placed to the windward of a camp fire, to kill the chill of the summer nights. The long table was without shelter, and the boatmen slept aboard the yacht.

San Clemente is picturesque and rough in the extreme,—made up of rocky cliffs which breast the sea with bold fronts, giving way occasionally to small sandy beaches. On the west side singular conditions hold. Vast areas of sand have swept up and filled many cañons, the wind performing strange tricks and fancies. Where there was the most sand the beach was rocky with no sand. Everywhere we saw evidence of the aborigines,—mortars, pestles, grinding stones, piles of abalones, covered with cactus, telling the story of a once large and vigorous fishing population. Where had they gone?

“*Quien sabe?*” replied Mexican Joe. “I fish ‘round here forty years, an’ it look jes’ the same as it do now, only more mortars, more pestles.”

While the men were cooking dinner I strolled around the east shore, an easy matter, as goat and sheep trails led everywhere, though the coast was often a sheer precipice, making it difficult to reach the water. Every fifty feet or so, I found black earth, broken shell, bones, the débris of an ancient camp site. A mile of dodging cactus and climbing brought me to an isthmus where the

island flattened out into a neck of sand connecting the main island with a northern point. The sand, which was blown into strange shapes, had evidently been the burying ground of the ancient people, as bones, shell, and various objects were strewn about, uncovered by the restless wind.

Crossing to the west side I found traveling better, and presently came upon a plateau, one hundred feet above the sea, of pure sand, hard and encrusted with tens of thousands of white snail shells, all empty, and bleached.

This, too, had been a graveyard, and human bones protruded here and there. Walking on, I came suddenly to a vast pit in the white sand. It must have been one hundred and fifty feet deep, its sides perfectly smooth and at an angle of 60° . At the bottom was a single tree, blasted and dead.

I had been walking up a cañon that had been filled with sand to a depth of one hundred or more feet, and the wind, by some caprice, had scooped out this singular pit, which I could compare only to the trap or pit of some gigantic ant-lion. It was an alluring jump, and confident that I had no lookers-on, I drew back a few paces, ran at full speed and literally shot through the air, thirty feet, struck the fine sandy side, and slid down the toboggan slide to the bottom.

From here I cut across the island and found the men serving dinner in the open air, California fashion. We discussed the ancients, proposed their

better acquaintance on the morrow, and late into the night sat about a big driftwood fire listening to the old stories of Mexican Joe, the oldest inhabitant of Santa Catalina ; then turned in, sleeping in the open air, that had a tang to it like some insidious cordial. The rolling of the sun up over the edge of the world awoke us, and all hands aided in getting the breakfast. G——, who was "chained to a desk" the better part of the year, claimed the potatoes ; R——, an erudite judge, the onions, to peel which was a delight, to the amazement of Joe. I tried my hand at bacon and fried eggs, and in half an hour we had a breakfast that appealed to the gods : steak smothered in onions, bacon, eggs, fried smelt, just to show three good cooks and boatmen what old campaigners could do if it came to the pinch. Later we pulled out to the yacht to try some fishing which one of the men had discovered.

San Clemente is surrounded by a bed of kelp that rises out of deep water in long, powerful, broad, olive-hued leaves, or fronds — a *Macrocystis*, that forms a protection to fishes all along the coast. It was about fifty feet wide, and just outside of it the yacht swung, protected from the west wind by a little point. A strong current ran alongshore here, and in the wake of the schooner numbers of attractive fishes were seen ranging, if guessing counted for anything, up to fifteen pounds. I had what is known as a yellowtail rod, about the size, length,

and weight used at Cuttyhunk and other places for striped bass, though my rods were longer and lighter than many. I had one Abbey and Imbrey butt, and three sizes and lengths of tips. I rigged this with one of the longest, which gave me a rod about eight feet in length, the tip being pliable and slender, yet sufficiently powerful to lift a ten or fifteen-pounder should it chance to have a fit of sulks. I used a 4/0 O'Shaughnessy hook with a wire leader, a No. 16 Cuttyhunk line, and an Edward vom Hofe reel that would hold about one hundred and seventy-five feet of this line when wet.

We had brought a supply of sardine and smelt bait, as well as crayfish, and as soon as Mexican Joe cast his eyes astern he called for the latter and pronounced the game whitefish. By tossing over the shells of the crayfish he attracted the fishes to within thirty feet of the stern, where we could see them play and watch their every movement.

It was only necessary to unreel; the current carried the bait back into the chum, then — *zip-zee-zee!* and the reels gave tongue. It is not always true that the largest bait takes the largest fish, but I baited with the quarter tail of a crayfish and secured the king of the whitefishes. He played entirely on the surface, after the fashion of the bonito, or as a bonito should, swimming out into deep water in a long, splendid, resonant rush to the music of the reel; then came dashing back faster than I could take in the line; cutting the blue

water, now tossing it high, trying to reach the kelp, turned only by good luck, and gaining line all the time. The fish was a delight-giver from every point of view, and it required all the finesse I could muster to save the day with the light line and slender tip. It presently came alongside and was lifted in, at the same time three rods were playing whitefish to the jangle of as many reels. Few anglers have even seen the beautiful fish that Mexican Joe held up for my inspection, as it will not live in an aquarium and soon fades when out of water.

"*Mucho bueno blanquillo!*" cried Mexican Joe.

"*Caulolatilus*," said our scientific angler.

A beautiful fish, its principal color was the most delicate olive; its long dorsal fin, a most sensitive organ, tinted with blue, the other fins blue and yellow or old gold. It was so richly yet modestly colored that I will not attempt a description; but the impression was of olive with dashes of blue, orange, and pink. It had a splendid eye, richly colored and very expressive. The head was large, rising in an arch,—in all a beautiful catch.

We had found one of those rare happy places where there is no waiting, where the bait was taken as soon as it reached twenty feet astern, and where we could observe the entire play of the game. We caught these big fellows until the tide turned, when they stopped biting; and we had sufficient for the camp and the sheep-herders,—hermit exiles who came down to ask for fish.

The whitefish is one of the common catches of the islands, found on rocky bottom and where the kelp is thick, and in all sizes is a game fish. I have caught a four-pounder with an eight-ounce split bamboo rod and had all the sport desired; and as we have them up to twenty pounds, and doubtless thirty, the fish affords a wide range of sport with the rod.

While casting into the blanquillos astern I had caught an occasional glimpse of a larger fish darting about, which Joe said was a yellowtail, adding that it could not be taken with a rod, that it would "bust" any and all such "contraptions." I rigged a seven-foot rod, and baiting with a sardine, cast and reeled slowly in. If I live a thousand years (which Allah forbid!) I shall never forget the strike that came, as it *was* a strike. I felt that I had received a blow. Fifty feet of line went with a zee-e-e-e-e-e that apparently had no end; then changing to a rip-rap series of rushes, zee-e-e-ze-e-e-e-ze-e-e-e-e! I have since then seen a man weighing two hundred pounds so "rattled" by such a strike that he dropped the rod. I have seen a woman holding a line and screaming at the top of her voice; and have also seen an able-bodied man jerked from a high dock overboard by a yellowtail; hence I consider that my sensations were excusable, and after nearly twenty years of yellowtail fishing I present my compliments to the fish, and, for its size, pound for pound, award it all the honors.

No fish exceeds it in game or fighting qualities, and I have never seen a yellowtail hooked that did not make a heroic fight. The yellowtail never gives in ; it never knows that it is caught.

My fish made a dozen or more of these plunges, which carried it down and out two hundred feet ; then I got into the boat, a light skiff, and was slowly towed out into the channel. I fought it with all my strength, yet did not bring that yellowtail to gaff until twenty-five minutes had passed. It dashed along the surface, bounding around the boat like a trained ringster ; it plunged deep into the channel, and sulked like a team of salmon ; it came up protesting, to repeat this time and again. I pumped and reeled, played my weary thumb upon the rubber brake ; I tried my fingers on the line above the reel ; I "gave it the butt," until the good noibwood creaked and threatened to buckle ; but this splendid fish, this yellowtail of San Clemente, was surely playing me. When it finally came in, it circled the boat several times, dodged the gaff, and tossed a quart of water into my face. It rejected all overtures, laughed at, scorned me, and when gaffed and landed and unhooked, leaped out of a barrel with a spring that would have done credit to a tarpon, and disappeared. Mexican Joe said that the fish weighed about fifteen pounds. For once I believe this true boatman played me false ; that yellowtail weighed *fifty pounds*, and I rejoice that he is free to demoralize some other

tenderfoot along the Santa Catalina main. I hardly know to what to compare the yellowtail. The next one gave me almost as much trouble, and I landed him in fifteen minutes. Comparisons are odious, but the yellowtail is the bluefish of the Pacific, and he has a cousin, the amber-jack, which I have taken off Florida. Combine the gamiest bluefish and amber-jack, and the result will be the yellowtail, *Seriola dorsalis*, of the Santa Catalina Channel.

The yellowtail is the fish of the people. All else may fail,—winds may blow or die; tides may be at the flood or ebb; every impossible condition may hold; it may be Friday, on the thirteenth of the month, and your rabbit's foot at home,—but the yellowtail is biting and fighting; he is omnipresent and irresistible.

It seemed a mortal sin to kill so beautiful a fish; so we fished and set them free; and that I hooked the same fish twice within two hours demonstrates that the yellowtail did not take it very seriously. They were out fishing themselves, and a tenderfoot was the game. The yellowtail of California is shaped somewhat like a bluefish, but has a larger head in proportion to the body, a powerful jaw and a long dorsal fin. The upper surface, the back, is green in the water, olive perhaps, but when it bursts from the sea, and comes in, it is a peacock blue, a dazzling creature. The fins are gold, and a yellow stripe extends from head to tail along the median line. Its tail is yellow or golden; its

belly like newly minted silver, and the eye a blaze of light. The fish is a type of power, activity, cunning, and stupidity. It is an easy trick to take the yellowtail of the open sea when they have just arrived ; but the yellowtail of the dock, as at Avalon, soon become educated, and only the skilled anglers can take them. They come up from the Cortez Bank in May or April in schools, often covering the water, then break up and parade the blue waterways along the hanging gardens of these isles of summer.

There was no hunting for game at San Clemente ; we merely fished, and the game came up against the tide. Among the game fishes was a sheepshead, entirely different from the sheepshead of Florida,—a huge dome-faced creature with vertical stripes, its head black, its lower jaw pure white, then a stripe of dazzling red, then one of black, and so on. Give this fellow a cunning eye that rolls about in every direction, and you have the sheepshead, from five to thirty pounds, a strong player.

I found him first in a golden corner of the kelp forest ; could see him with whitefish and golden angel fishes, poised in the arches of this wonderland. I dropped the bait, and even saw the strike. The young of this fish are white or all red, assuming the stripes in later years.

As night came on we went ashore, and after dinner sat around the fire again, listening to the yarns

of the men and old Gallagher, a herder, who had lived on the island many years. Sometimes he remained on the island a year or two, accumulating wages and merit; then he would be seized with a desire to leave, and would row across the twenty-mile channel to Santa Catalina in a skiff, take the steamer from Avalon, and in Los Angeles distribute his wealth; a week or so later he would again be king of San Clemente. Few people visited the island in the old days, and Gallagher's life must have been a Crusoe-like existence.

Quite as fascinating as the fishing was what the men called relic-hunting, literally robbing the graves of the unknown early inhabitants; and we became skilled in detecting the implements of stone and wood. I found one day in the sand dune described, a flat stone. Lifting it up, I dug up several abalone shells containing beads. Mexican Joe was positive that this marked a grave, so we dug down into the clear sand and came upon a skeleton in a fair state of preservation. It had been buried in a sitting position, perhaps centuries ago; the head pressed between the knees, and doubtless bound by a rope or cord of kelp. Over the skull was a flute, made from a deer's leg-bone. Behind it was another, and in front another. All these flutes were inlaid with pearly abalone, fastened to them with asphaltum. Doubtless the owner was some great musician of his tribe and day. Not far from here Mexican Joe showed us what he called a battle-

field, where numbers of skeletons were mingled one with another. Nearly all the skulls were fractured and the bones broken. Undoubtedly the bones represented an island battle. In the vicinity were found implements of various kinds: clubs, pestles, bowls of steatite, ornaments of pearl, stone, and wood, and numerous beads. Not many centuries ago a hardy race lived here, but they were swept aside by some human or other cataclysm, and now the wind was playing havoc with their bones. In some caves mummies of dogs were discovered, and a sort of tapestry of kelp or seaweed, buried in the sand.

"How is it, Joe," I asked, "that all of these fine mortars are broken?"

"The reason is evident," put in one of the party, who was painfully scientific. "These people were doubtless attacked by a large force, driven away, and their household gods were destroyed by the enemy."

I looked at Mexican Joe for confirmation, but his good-natured face broke into a grin. "I don't know who drove them off," he said, "or where they went; but as for the mortars and things, why, I busted them myself, me an' the rest of the herd-ers;" thus in a second dispelling a carefully concocted and scientific theory.

"But why?" asked the scientific angler, with a gasp of amazement.

"Why?" echoed Joe. "Why, jest to pass away

time, I s'pose. That's all the sport we had, so we tried to see how many we could bust."

This was a fact. Articles which, if collected and kept, could have been sold by these men for thousands of dollars to any museum in England, Germany, or America, were broken as a pastime, and the despoilers received but fifteen or twenty dollars per month wages. So much for the lack of ethnological appreciation on the Kuro-shiwo. But this should not be charged up against Mexican Joe. He is merely "built that way," and is one of the best boatmen on the Santa Catalina Channel; good-hearted, genial, a perfect sailor and boatman, a skilled mountaineer and herder, knowing every cañon of the island ranges; a well-known character on the coast of Southern California. Probably few boatmen have so large a circle of friends and patrons as this Mexican, truly the oldest inhabitant of Santa Catalina.

Toward the last of our stay at San Clemente I went around the island and decided to land, if possible, on the windward side. We left the yacht lying off the kelp beds and pulled in to the beach, where a good sea was running. I knew something about landing in the surf, and began to take off my shoes, when Mexican Joe said, "Now, gentlemen, I've been ashore here plenty of times. If you do jest like I say, you won't get a shoe wet;" which we did, and it was worth while to see the skill displayed. Joe kept the boat head out to the seas,

gradually drifting in, and waited until he got just the conditions he required, then he whirled her about, and on the crest of a big roller we shot in upon the beach, and so high up that every man leaped out onto the dry sand. As a nice calculation, it was a brilliant success. Joe has the attributes of a great boatman, courage, good judgment, and caution ; and I doubt if he has ever failed in a day's fishing,— he always knew when and where to go.

CHAPTER XIV

THE HAUNTS OF THE LEAPING TUNA

Remarkable Experiences of Anglers. Boats towed from Ten to Fourteen Miles. A Hard Fighter. Battles of Anglers. The Temple of Chinigchinich.

IT is a question with me whether angling or archæological research (a polite synonym of grave robbing) is the more fascinating. On the way across the San Clemente Channel Mexican Joe revealed to me a secret; he is the oldest inhabitant and has lived on Santa Catalina Island forty years. It appears that one Cabrillo, a captain of Cortez, discovered the fair island, so far as the Spaniards were concerned, in 1542, and named it La Vittoria. He found it inhabited by a sturdy race having canoes which held twenty men. In 1602 the islands were again discovered by Viscaíno, who renamed them, giving the titles they now hold. The historian of the latter, Torquemada, left an account of the natives he found in possession; declared them to be worshipers of strange gods, and described a certain temple to the god Chinigchinich, somewhere up in the mountains, but where? Mexican Joe confided to me that he *thought* he could find it, just as Bob Rand on the outer reef swore by

all the gods that he would show me the robalo; and I fell into the illusive trap, so I have fallen into this.

I have been on the quest of Chinigchinich ever since. When I am fishing with Mexican Joe or some other delight-maker of these summer seas I honestly believe I am on trolling bent; but the fishing is merely a subterfuge; I am in fancy roaming up the cañons that reach from the sea to the upper range, or scanning the winding rivers of verdure from the tuna ground, dreaming of Chinigchinich and his temple, that, according to Mexican Joe and Torquemada, stands somewhere just over the divide or behind the bend of some distant cañon.

I have more than a fondness for the St. Lawrence River. Between Quebec and the mouth of the Saguenay the land rises in splendid slopes to the Laurentian mountains, the oldest hills in this fair land. Near at hand they are clothed in green, but the peaks and ridges, five or six miles ahead or distant, are of an ineffable mazarine tint or tone that has no color name. When I first saw it the anticipation of reaching it was a delight in itself; but as we sped on and on I found that this glorious blue was a thing dreams are made of, was a fantasy of distance. There they stood, mountains garbed in a glory of divine color, ever beckoning, yet as I sailed on and on in close pursuit I never gained an inch on these mountain Loreleis; new

peaks and ranges constantly assumed the splendid tone, yet always ahead,—alluring, enticing oreads of color which drew one on and on into the very heart of this land of dreams.

Every land has its fetich. It is some big fish, some rare flower, some radiant gem, some forgotten ledge of gold or silver; and at Santa Catalina, at least to me, it is the temple of Chinigchinich; and I am breaking no confidence between Mexican Joe and myself when I enter in this log the expectation that *sometime* when trolling in the shadow of the rocky cliffs he or I will sight it, or perhaps stumble upon it, after this quest of years.

Mount Orizaba is one of the highest peaks of Santa Catalina, twenty-two hundred feet or so in height, and at its base, in a cañon formed by two of its divides, lies one of the fairest bays on the island. It is on the north coast, consequently is in the lee, and off its shining sands we rounded to and cast anchor. According to Mexican Joe it was his old home, in the very centre of the best fishing, and commanding the wildest and most beautiful views on the island. Our tents were pitched under some cottonwood trees, and from the camp I could hear the love notes of innumerable quail up the cañon, see a bald eagle circling in upper air, while the azure sea, here clear as crystal, smooth as a disk of steel, stretched away to the mainland, thirty miles distant, over which rose the snow peaks of the lofty Sierra Madre.

The bay faced the channel, which was nearly always smooth, a lee being formed by a rocky point which extended out two miles above. It was a singular fact that this point and the rocks of Avalon Bay, four miles to the south, formed the limits of the tuna fishing ground; in other words, nearly all the tunas caught in the world with rod and reel are taken here.

We sent the men down to Avalon for the daily mail, and had the luxury of papers, and many of the impossibilities of civilization in camp, yet the charm of isolation. The third day, while we were coming down the mountain trail, Joe hailed us from the beach and pointed to the channel. Something, a miracle, had happened. There was no wind, the sea was perfectly smooth, yet an area covering possibly twenty acres was lashed into foam, as though some submarine force was at work.

"Tunas!" shouted Joe.

"Tunas!" echoed up the cañon, and two anglers ran down the beach, tumbled into the boat, and shortly were running out of the little bay, one in the launch and one in the row-boat,—a division of chances. The tuna is a large mackerel-like fish and a world-wide traveler. On the Pacific he comes to the island shores in May or June to feed upon flying-fishes and squids, driving the former into the open bays, rounding them up with the skill of a general. In ten minutes I could hear the roar of waters, then the flying-

fishes began to go by, over and under the boat. Then, ah ! then the reel spoke, *z-e-e-e-e-e-e-e z-e-z-e-e-e*, as I had rapidly paid out my line and had sixty feet out by the time we reached the school.

The tunas were chasing a large school of flying-fishes, and the roar and foam came from their rushes along the surface in pursuit of the game, and now and then one went hissing into the air in pursuit of a flier, to turn gracefully and drop into the sea of foam. The tuna took the bait on a rush and tore two hundred feet of line from the reel so quickly that I hardly missed it, then bore down and jerked the rod with powerful blows—*zip-zip-zip*—with a tension that told on the thumb pressing upon the leather pad and took all feeling out of it. Such a brake with an ordinary fish is a deadly thing, but it was a bagatelle to this tiger that gathered in the line in feet and yards.

In vain did I use the brake with the left hand, pressing the line upon the cork grip, making two brakes, and with the patent drag three. Despite this, *zee-zee-zee* went the click, always going, the boatman meanwhile backing the launch after the fish, using his oars to keep me face to it.

Nearly four hundred feet were taken by the tuna before I stopped it, then it turned and came up like a rocket, swirled at the surface of the clear blue water, and dashed around the boat to head out to sea, towing us in a straight line, as though hold-

ing a course. I now gained thirty or forty feet by a herculean effort and broke its course, forcing it to sulk again down somewhere in the heart of this great rift in the Santa Catalina Channel, really a vast cañon between the lofty island and the mainland. Now the tuna turned in, towing us at a four-mile an hour gait, and carried the boat determinedly inshore, while I pumped and lifted, and reeled when I could, and all the time that seeming miracle was being enacted, a fish of unknown size towing a heavy boat by a twenty-one thread linen line three hundred and fifty feet in length.

An hour slipped away, then another; the launch was being towed in a circle and the tuna was an estimated two hundred and fifty feet away and apparently as strong as ever. I could tell this, as every one hundred feet of my line had a blue silk band, every fifty feet was marked with red. My companion had lost a fish and now rowed by, advising me to "go in and win!" How cheap is advice to the looker-on! Three hours slipped by, and I was still contemplating the space below while that untamed steed still fought and swam and fought again. I soon found that when I rested the fish apparently gained twice as much, and the only way to end the game would be to fight to a finish without cessation. This was apparently easy in theory, but to the angler who has been holding a dead weight on his left arm for three hours, and pressing his right thumb

against a leather pad all that time, it is a forlorn outlook.

I rallied, and by mere good fortune brought up the fish to the quarter. My boatman was about to gaff it when it stopped struggling, rolled upon its side, dead, and was gaffed and hauled in, a fine fish that weighed one hundred and fifty pounds. There was but one conclusion from so sudden a termination of the battle,—the tuna had died of heart-failure; and I have seen several such endings. I have had a fish struggling and fighting with a fierceness that threatened rod and line, at least two hundred feet away, suddenly stop and doubtless die of the over-exertion. I have had the good fortune to take large fishes of many kinds, but for hard fighting and persistency, force and strength, I award the palm to the tuna, one of the largest of the bony fishes.

The tuna presented an attractive appearance as it lay on the canvas,—about six feet in length, trim as a privateer, well proportioned, of the bonito type; body stout, tail powerful, a little row of yellow or old-gold finlets between the sharp dorsal and the caudal, the side fins short, the eye bright and beautiful, jaw powerful, belly silver; altogether a most striking and attractive creature.

“Tunas mighty uncertain,” quoth Mexican Joe, as he rebaited my line. “Sometimes they strike in in May, then it’s June, and sometimes they jest about give the island the go by.”

" You mean they don't come in great numbers?"

" That's it," replied Joe. " I dunno where they come from, but most of the men think they go out to sea and to deep water off the Cortez Bank, some sixty miles to the southwest ; but I've caught them in winter, and some are around all the time. And again they come in September."

" Once," he continued, " I was sailing a big boat from the island to San Pedro, and was trolling with a big hand line with a red rag as bait. All at once the boat stopped. A big tuna had stopped her, as though she was anchored, and we were running before the wind at that."

Joe was baiting my hook as he spoke, and the delicate line was a source of wonderment to him. The hook was a number seven, the line a six hundred foot twenty-one thread Cuttyhunk, the rod a forty-ounce greenheart, built to order, eight and a half feet long, light, supple, but strong enough to lift a sulking fish. I used a leader eight feet long, longer than the fish, so that it would not chafe off on the finlets when the fish was boring down. The bait was a big flying-fish twelve inches in length,—the natural food of the tuna at this time.

There were half a dozen boats fishing now ; two or three were fast to tunas and being towed hither and yon. Later I had other strikes and missed several. Upon examining the bait I found

that the tuna had struck at the large black eye of the flying-fish.

This was a remarkable day for tunas. An acquaintance, Mr. Wood of Los Angeles, hooked a fish early in the morning and played it seven hours. He is a powerful man, but he never got the fish within sight in that time, and wisely gave it up. I had passed a few minutes before, and he was then five miles offshore holding the rod, that formed a perfect curve ; the boatman, Harry Elms, keeping the craft stern to the fish, which was slowly but steadily towing them out into the channel. Word had been passed to Avalon, and parties came out to see the man who had fought the unknown seven hours. One carried him some lunch, and offers were made to aid the heroic angler ; but he had just recovered from the grippe, and as the struggle was beginning to tell on him, at the end of seven hours, in deference to advice, he handed the rod over to Elms, a strong, sturdy fellow, who, being absolutely fresh, thought he could bring the fish to gaff in a short time. They had under-estimated the strength of this fish, as despite the lifting and pumping the hours melted away, and the big fish towed the gamy boatman out to sea. Ten hours from the strike Elms was alone in the boat, hoping that he could still wear the fish out ; but the eleventh, twelfth, and thirteenth hour passed, and counting the turns in and out, it was estimated that he had been towed two miles an

hour, or nearly thirty miles, and ten miles directly out into the channel. A sea had picked up, and Elms now found that he could gain by lowering his rod when the launch fell into the hollow of a sea, then if he held hard the next sea would lift the fish, and in this way he could gain a foot.

I doubt if an angler ever had a more exhausting struggle, and at the end of thirteen and a half hours Elms found that he was gaining, and fourteen hours from the strike he shouted that he could see the fish. Several launches were lying by him, and as it was manifestly impossible for him to gaff the tuna and hold the rod at the same time, an angler offered his services and was put aboard.

The tail of the fish now appeared at the surface; the fish was boring down head first. The gaffer leaned down and struck, but the hook did not take; it scraped along the surface, alarming the fish, which gave a mighty rush, broke the swivel, and disappeared, after having worn out two men. Such is fisherman's luck. Judging from the size of the tail, those who saw it believed it to have belonged to a fish of six hundred pounds or more. The fight doubtless killed the tuna, as the steamer Falcon passed a very large fish floating on the surface near the spot the following day, almost certainly the same tuna. A large reward was offered for the fish when the news was reported,

and various boatmen went in search of it ; but the sharks dined on the great unknown that made the gamiest fight ever recorded on these happy hunting-grounds.

The best tuna fishing is in the large bay at Long Point. Inshore a white, sandy beach encircles the entrance of a great cañon, and from it reaches away the verdant river, the cañon rising to the Cabrillo mountains, while all along shore are rocky cliffs in red and yellow ; the water, deep, in marvelous tones, reflecting the vagrant cloud flecks, the rocks and mountains. Glancing down into the clear water, you see delicate shapes of jelly-fishes, some minute, others giants with long resplendent trains, while inshore and skirting the rocks are the wonderful hanging gardens of the sea. Not a breath of wind disturbs the surface of the bay, and in the morning, as the sun rises, this sea of delights takes on tints and colors impossible to reproduce. If these waters could speak, what tales they would tell of savage life, of the galleons and packets of the Conquistadores, of Cabrillo, Cortez, Viscaino, Drake, Monterey, and many more ; and somewhere up in a deep cañon, overgrown perhaps by chillicothe, wild lilac, or ironwood, is the temple of Chinigchinich. I fancy I can see it, as the launch moves slowly on, and turn to Mexican Joe and ask him if he has ever hunted in that particular cañon. Joe laughs, and then — my rod is jerked into the water. *Zee-e-e-zee-e-e-e!* and I am in the toils of

the leaping tuna. I hooked this fish at once, and it towed me four miles, once up the coast to Long Point, then down to Avalon, where it was gaffed.

Never had such a tuna season been known, and it is sufficient for this log to give some of the most striking incidents in the season's catch. On the third of July I went out with a friend and sighted tunas to the north. We thought a heavy sea was breaking on the Long Point rocks, but it was a school of tunas. We both had strikes at the same time, and both saved our fish. As it was manifestly impossible to play them from the same boat, we separated, and in an hour had both tunas aboard, 150 and 130 pounds. The fish bit rapidly as we made a turn about the school, and in a short time we took two others. It was a strong temptation to see how large a bag we could make, and we agreed that we could have broken the record for numbers for a given day then and there; but we broke the record in theory only, not wishing to waste the splendid fish, and being unable to use more than we had; these we knew we could dispose of to the local taxidermist. We tried casting for them with success on another day. The tunas were not leaping, but swimming in schools over the bay like ducks, with one in the lead. I found we could reach within thirty feet of the school and cast ahead of them. Evidently they thought that a flying-fish had alighted among them. There would be a swirl of waters, and the reel would give tongue as the

frightened fish dashed deep into the channel, dispersing the school.

These placid waters were the theatre of exciting sport. Here I took the first large tuna, one hundred and eighty-three pounds, at the time the largest ever taken with a rod and a twenty-one thread linen line. My boatman was Jim Gardner, an English sailor who developed very clever qualities as gaffer. This fish towed us ten miles or more, and in the fourth hour towed us straight away four miles; during this latter period I was nearly beaten. I had fought the fish with all the strength at my command for three hours, and the continued drag on my left hand and arm began to produce violent palpitation of the heart and gradual weakness. When the fish was not fighting or attempting to plunge it was towing the boat by two hundred feet of delicate line, and after three hours and three quarters I realized that I was *in extremis*, while the tuna appeared to be as strong as ever. I remember I endeavored to distract my attention from the fish, and as it towed me steadily, to fix my mind upon some foreign object, as I appreciated that the heart fag was to some extent the result of mental excitement consequent upon the struggle and the peculiar and unique tactics of this particular fish, it having repeatedly charged the boat on the surface, turning to rush away when ten feet distant,—a magnificent performance, a spectacle to arouse intense enthusiasm; but when repeated time

and again I found that it wore on my nerves. I knew I had big game, and the fear that one of these rushes would end the play was disquieting. I thought of the temple of Chinigchinich, looked at the graceful outlines of the mountains, even counted slowly in a vain effort to reduce the beating of my heart, but it was all useless ; that strong, ceaseless pull, that strange vibration coming up the line, the sense of the unknown fish towing us with unabating strength forced itself deep into my mind and imagination, and twenty minutes before the end, I expressed the opinion to Jim, quietly but positively, that the tuna had me, in sporting parlance, "on the run."

I had been fighting this fish steadily for nearly four hours and collapse was staring me in the face. I felt that I had reached the limit of endurance. My arms were numb and my heart was giving all the symptoms of failure, and I remember, despite my agony of mind and body, that it occurred to me that it was an interesting psychological study, this effort to beat down, to argue away the extreme exhaustion of the body. Whether it was the invocations of my gaffer-behind my shoulder, or the encouragement of some friends who were following in a launch, or the desperate shame of failure before the lookers-on, I do not know, but in some incomprehensible way I pulled myself together, and again bent to the reel, and the splendid fish, ever circling the boat, came slowly in. It seemed an eternity to

me ; then we saw the full and complete outline of the fish for the first time, and appreciated the cause of the struggle ; then, tell it not in Gath, the reel refused to work. It was one of the best reels in the world, but so great had been the strain that the line had sunk into the coil and clogged ; human power could not move it. Imagine the situation, its horrors ! Walton might have sighed and quoted some ancient philosopher, or he might have *thought, Culpam poena premit comes*, believing that he deserved it, for attempting to kill so game a fish. But my boatman was not of this timber, far from it. He swore in vigorous English ; he conjured all the gods in many tongues ; he rose to the occasion, while I, breathless, winded — but this is not a confessional, only the log of a lucky sea angler who proposes *Credo quia impossibile est* as the motto of sea anglers, for it *was* the impossible that happened. My last efforts at the reel had demoralized the tuna, which now swam slowly around, giving me time to overrun the reel several yards and reel the line in again ; after which the tuna began to come in again. It reached the quarter, and as it was slightly tipped upward, I saw again the full outline of its splendid proportions against the blue water ; then — my boatman gaffed it.

Exactly what happened no one knows, but the big gaff pole splintered in his hands at the tremendous bound of the fish, and the tuna took

fifty feet of line before I could stop it. Keyed up to the highest degree of excitement I reeled vigorously, and in a few moments again had the tuna near the quarter, and held it, while Gardner gave it its quietus. The gaff slipped beneath it; a jerk, a struggle which enveloped gaffer and angler in foam, spray, and flying scud, and the big head was held a moment hard against the rail; I standing with shortened line ready for the rush that might come, the gaffer grim, blinded with spray, his arms jerked almost beyond endurance.

But the game was ours, the splendid creature in silver, gold, and azure hung quivering, as we stepped on the rail, bringing it down to the water's edge; then Gardner slid the tuna in, where with its ponderous tail it hammered the boards such ponderous blows that I fancied it might stave in the craft, while we doffed our hats and gave a rousing cheer over the hard-won victory.

At this time it was not supposed possible to take so large and active a fish with rod and reel and a twenty-one thread Cuttyhunk line; consequently the catch of one hundred and eighty-three pounds was a notable one.

It was this capture and the unsportsmanlike conditions of fishing at the island which caused me to suggest the organization of the Tuna Club. The splendid fishes of the region, yellowtail, white sea bass and others, were being slaughtered by the ton. I had seen boats go out with five or

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six hand lines rigged out astern, to return with forty or more fish, none less than fifteen pounds, and running up to twenty-five, each with the game qualities of a forty-pound salmon. It was a depressing sight, as most of these fishes were fed to the sea lions and sharks. How to stop it was the question, and I conceived the idea of an appeal to the innate sense of fair play that is found among nearly all anglers. I suggested the Tuna Club "for the protection of the game fishes of Southern California," and a constitution and by-laws that would permit the use of lines up to twenty-four thread only and light rods, with the condition that every angler must land his own fish.

Some of the best-known anglers in the country joined the movement, a club without a club-house, and I was honored with the presidency. The result was remarkable. The example of these gentlemen was so potent that hand-line fishing was abolished and I doubt if any hand lines can be found at Santa Catalina to-day. The boatmen will not permit their use, as it disqualifies their patrons from the prizes of the Tuna Club tournaments and all records. With a rope-like hand line, a twenty-five pound yellowtail can be landed in one minute or possibly two; but with a rod and a thread-like line, from a nine to a twenty-one thread, it is a matter of fifteen or thirty minutes, and fifty per cent of the game escapes. Thus overfishing is practically impossible, and much finer sport with.

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the rod is obtained. The result is, that to-day the waste of these fine game fishes is practically stopped.

To emphasize still further and make rod fishing popular I outlined an annual angling tournament, to begin May first and end October first, during which valuable prizes of rods and tackle, medals and cups in various classes were offered to anglers who took the largest fishes of various kinds with the light rods and fine lines specified by the by-laws of the Tuna Club ; and that few, if any, of the thousands who fish at Santa Catalina to-day use a hand line, or take any of the game fishes found here unfairly or in any manner other than one which appeals to the highest sportsman-like feeling, shows what the combined influence of anglers can accomplish. Nowhere in the world does a higher standard of sport prevail than on the tuna grounds of Southern California. The following is the angling tournament announcement of this club for a recent year.

The Seventh Annual Angling Tournament

of the

Santa Catalina Island Tuna Club

May 1 to October 1, 1905, inclusive

CONDITIONS

The only restrictions are the rules of the Tuna Club that rods and reels must be used and that rods must not

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be less than six feet nine inches in length, the tip of which must not weigh more than sixteen ounces. By "tip" is meant all that portion of the rod from reel seat to end of rod. The line must not exceed twenty-four threads or strands and be capable of sustaining a dead weight of not more than forty-eight pounds. All anglers must bring their fish to gaff unaided, and the fish must be reeled in — a broken rod either before or after gaffing disqualifies the angler. The tournament is open to amateurs only, professional boatmen, those engaged in allied industries on the Island, and members of their families being barred, except as in special class "I."

PRIZES

Class A. LEAPING TUNA

Special Silver Cup, donated by Montgomery Bros., Los Angeles, for largest tuna, which becomes property of angler holding record for three successive years from present season.

For exceeding the Club record, Rod and Reel, donated by Edward Vom Hofe, Rod and Reel Manufacturer, 97 Fulton Street, New York.

For the largest tuna of the season other than the above, Tuna Club gold medal; Banning Cup. A special gold button will be given to the angler taking the largest tuna of the season. Should two anglers succeed in breaking the present record, a gold button will be given for each fish.

For the second largest tuna of the season, other than the above, a silver-mounted rod offered by James McDonald, of Deposit, N. Y.

For the smallest tuna, booby prize.

For the first tuna of season, Rod.

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Class B. BLACK SEA BASS

For exceeding the Cup record; Tufts-Lyon Arms Co., silver cup; Rider-Macomber gold medal and extra silver-mounted rod.

For the largest black sea bass, other than the above, silver-mounted rod.

For the smallest black sea bass of the season, booby prize.

Class C. WHITE SEA BASS

For the largest of the season, angler's tackle box.

For the second largest, gaff.

Class D. YELLOWTAIL

For the largest yellowtail of the season, John F. Francis, gold medal and silver-mounted rod.

For the second largest fish, gaff.

Class E. ALBACORE

For the largest fish of the season, silver-mounted rod.

Class F. ROCK BASS

For the largest fish of the season, Vom Hofe line dryer.

Class G. SHEEPSHEAD

For the largest fish of the season, angler's pipe.

Class H. WHITEFISH

For the largest fish of the season, gaff.

Class I. PROFESSIONAL BOATMEN

For the best-equipped launch, four H. P. or over, rods, reels, lines, gaff, and general comfort to be considered, silver-mounted rod.

For the best-equipped launch under four H. P., with or without engine, rods, reels, lines, etc., to be considered, silver-mounted rod.

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All the catches made with the view of competing for prizes must be reported at once to some member of the weighing committee, or a member of the board of directors of the club, and weighed in his presence and posted. All fish must be brought to the club scales and weighed thereon. No allowance will be made for shrinkage. Tackle used must be shown when fish is weighed.

In fishing for any fish during the tournament season there shall be only one rod and reel used at a time for each angler occupying a boat. The using, casting, or handling of one in any way by the boatman shall disqualify the angler. This rule shall not apply to baiting the hook.

Class J. LIGHT TACKLE COMPETITION

To encourage the use of light tackle, a silver cup is offered by Arthur J. Eddy, Esq., of Chicago, for the largest yellowtail of the season (exceeding 20 lbs.), landed under the following conditions :

Rod of wood, length not less than 6 feet 3 inches including butt, weight 16 ounces including butt, for each $\frac{1}{2}$ ounce over 16 ounces 5 per cent shall be deducted from the weight of the catch ; for each $\frac{1}{2}$ ounce under 16 ounces 5 per cent shall be added to the weight of the catch, so that a rod weighing 20 ounces would lose 40 per cent of weight of catch, while a rod of 12 ounces would gain 40 per cent. Line must not exceed 9 threads of any standard make. Rod with reel and line must be submitted to the weighing committee with the catch. The name of the winner each season will be engraved upon the cup. The cup shall become the property of the angler winning it three times.

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Class K. SPECIAL PRIZE — YELLOWTAIL

William M. Hunt, Jr., donates a Vom Hofe rod to the winner of the Eddy Cup for season of 1905.

Class L. SPECIAL PRIZE FOR LADIES — YELLOWTAIL

A Silver Dish donated by Mr. Robert E. Northop, to the lady catching the largest yellowtail during the season.

Class M. SPECIAL PRIZE — TUNA

A Gold Medal will be awarded to the boatman of the angler taking the largest tuna of the season. (The above applies to tunas over 100 lbs.)

It so happened that it was my suggestion many years ago that a tuna could be taken with a rod, and I was often laughed at for my prophecies. I did not take the first tuna, but I caught the first large one, a fish which in vigor and virility I would match against any two tarpons it has been my good fortune to hook. I have never seen a tarpon that I could not kill in thirty minutes by continuous fighting, though there are such fish, and other anglers have taken them ; yet this tuna fought me four hours, towed a heavy boat and an engine and two men ten or twelve miles, the oars of the boatmen being held against it and sometimes pulled to prevent the fish from towing us out to sea. There have been larger tunas taken since, but I venture the opinion that none of them — when fairly hooked, as this fish was — made a better fight. Size, at least in my belief, does not indicate

fighting qualities. The hard-fighting tunas are the medium-sized fishes, and this holds with tarpon, amber-jack, yellowtail, and others. I have taken yellowtails up to forty-five pounds, but a certain seventeen-pounder gave me more trouble than all the giants.

The catch of the big tuna created much excitement, and as we rowed into Avalon to weigh the fish the little town came down to give us welcome. Late in the afternoon I strolled down to the rack, where a group of people were still admiring the big fish, and some young women, descendants of Ananias or Sapphira, bravely having their pictures taken, standing by its side, rod in hand. "Jim" was rehearsing the catch, and a tenderfoot was listening with wide-open eyes at the yarn, not even questioning the fact that the tuna towed the boat fifty miles and leaped as many feet into the air.

Among the observers were reporters and correspondents, and I later saw myself pictured playing this leaping tuna forty feet at least in air. Another account in a magazine showed me calmly swimming and playing the tuna, the caption suggesting that I rather preferred that method. The Associated Press telegraphed the story all over the world, and the members of the peaceful Sea Anglers' Association in London received the account the next morning in the papers, and doubtless marveled at the big things in America.

As the tunas continued biting we devoted ourselves to this sport, and I found that about one tuna was taken for every twenty strikes. Newcomers, and they were here from various parts of the world, almost invariably missed the fish, on account, I believe, of excitement. They struck too quickly, or not quickly enough, and missed the psychological moment. I have fished with a number of anglers, or watched them, and have been in the toils myself, worn, as General Gordon said, in one of his fights, "to a frazzle;" so could enjoy the struggles of other victims. Yesterday I was a guest on a friend's launch and stood in the bow, where I could see the tunas coming up astern. Evidently they saw the bait thirty feet distant, and two would charge it on the run,—their fins near the surface, often tossing the water high in air. I would notify the angler, then would come the strike and the sounding reel—*zip ze-e-e-e!* And that there is tuna fever as well as the buck variety goes without saying. I noticed one young angler who became so nervous that he could not face the stern, could not watch the tuna as it came racing at him; so he turned back to, and as I shouted, "Here he comes!" he would turn red, then pale, and strike, and the fish would often pass on with fifty feet of his line in tow.

Last night I was trolling for tunas near the rocks, when just at dusk the tunas dashed in, chasing a large school of flying-fishes, which rose all about us, some going over the boat, one striking me

under the ear, so nearly knocking me out of my seat that the gaffer and boatman caught me. I had my revenge. Gardner hooked on the fresh bait that had selected me as a target, and I had a strike with it a few minutes later, but lost the fish, it being dark at the time.

Tuna fishing may be followed up to eight o'clock at night with success, but later the fishes see the line, due to the remarkable phosphorescence; at least the biting stops when the phosphorescence is at its maximum display. The spectacle of large tunas dashing through this seeming liquid fire is a marvelous one. Every motion is a blaze of light, and in Avalon Bay from the topmast the sight was one long to be remembered.

I fished to-day with Mr. D—— of Philadelphia, on the opening of the Tuna Club tournament. There were prizes of rods for anglers and boatmen for the first tuna of the season. Jim's boat was on the ways, and in a weak moment we took another and smaller one, though a good-sized yawl. I had a strike off our canon and never enjoyed a play so well. The fish, while powerful, was not a Hercules. I was fishing with a twenty-one thread line and a jointed, light greenheart rod, my yellowtail outfit. I wished to try the experiment. It detracts from my pleasure at least to know that I have all the advantage which the fish should have. This tuna was caught fairly, and by the watch I brought him to gaff in just forty minutes. I know this well, as

it was the last time-record I had from a valued timepiece. The tuna played on the surface like a bonito, did not sulk, and made a splendid picture of activity. As I reeled it to the quarter, Mr. D—— went forward to give me full play, and Gardner gaffed it cleverly and slid it into the boat. The next I knew, I was treading water. I have an indistinct recollection of seeing the fish bend, leap into the air, land on the gunwale, tipping the boat so that we all slid to that side, and capsizing her. I was standing in the stern at the time, overhauling my line, ready to hold the fish if it should attempt escape at the gaffing, and the boat literally dropped from beneath me. I began to tread water, and my head did not go under, so I merely stood in the water, holding my rod, laughing at the extraordinary suddenness of the change of scene.

But we were nearly a mile offshore, and our tender, a large launch, was six hundred or one thousand feet away, lying off, according to custom, to clear the line and not frighten the fish. I hailed her at once by waving my hat, and at that precise moment the new engine refused to work. The boat, which had gone down stern first, shot up into the air, covering the water with the tools of the angler: rods, oars, gaffs, boxes of tackle, pies (lunch), a much varied and graded assortment of articles, which spread out over the smooth surface.

The boat as it shot up fell over onto my com-

panion, who, as Gardner and I righted her, called out that he could not swim, and as any helpless man would, threw his arms about the bow, clinging to it, which had the effect of rolling the craft over and over. He was also handicapped with a heavy overcoat, while I was weighed down by a thick corduroy hunting suit, leggings, and heavy shoes. It was very evident that my companion was in a bad plight. The boat would not hold three of us, continuing to roll over despite the efforts of Gardner and myself; so I suggested to the boatman that we turn her bottom up, get the helpless angler on her, flattened out, and that we try to swim to the launch and assist in bringing her up.

This we carried into execution, or rather I did. I noticed that Jim was not very active; but there was not much time to think, so I turned the boat over and we pushed the angler onto the bottom and found that he could float by not moving. The tuna had passed out of my mind, and as we struck out for the launch I was thinking of the chance of reaching it so heavily handicapped; but we could swim and D—— could not, so it was the only thing to do. Gardner had been a professional swimmer before he became a tuna gaffer, and I was fairly at home in the water; and had we been dressed or rather undressed for the swim, it would have been an easy matter. Exactly how far we swam I do not know. I remember I was

very weary and that I experienced a decided sense of relief when a shout came over the water and I saw that the launch had gotten under way and was coming to pick us up. The launch had slowed down, and was about fifty feet from me, when my boatman's wife, who was on the launch, began screaming that her husband was drowning. I stopped swimming, and turned around. Far away I could see Mr. D——'s form on the bottom of the yawl, but Jim had disappeared. I knew that he was a perfect swimmer, and there was but one conclusion, sharks; and as I started to swim back to where I had last seen him, I looked down to see if the dun-colored menacing shapes that I had always scorned and whose courage I had despised, were about, but up out of the depths came an apparition, Gardner's head.

"What's the trouble?" I shouted, swimming toward him as quickly as possible.

"All right, sir. I've got the tuna," he replied, then disappeared suddenly, as though jerked from below, while loud screams of his wife again came from the launch.

I was amazed, and could hardly believe that Gardner could have held the gaff through all the excitement; but up he came, and now alongside, I saw that he held the gaff on which was hooked my lusty tuna that three times jerked this plucky gaffer down out of sight. The fish evidently would run ahead, turn, and bore down, hauling

the boatman several feet under water, a performance at once sensational and extraordinary, but one that did not disturb the serenity of Gardner in the slightest. At my offer of assistance he replied, "I'm all right, sir," and struck out with his right hand in a lusty stroke, dragging the struggling fish by the gaff with his left.

I reached the launch first, and well exhausted, hung to the rope thrown me; but when the men attempted to haul me aboard they could not accomplish it; my corduroy suit was like lead, so I hung a few moments, when I was gradually taken in. In the meantime Gardner had seized a rope thrown by his wife, and now threw his legs about the propeller and rested. I leaned down while the crew held me by the legs, and when Gardner lifted up the tuna I ran my arm far into its mouth, grasped it firmly by the gills, and gave the word,—the men hauling me by the legs, and I the tuna, which I dropped in the cockpit, where it flung itself about as though perfectly fresh. We then hauled Gardner aboard, and ran alongside the yawl, and threw a line to my plucky companion, who had insisted, in answer to our constant shouts, that we save the fish before picking him up, when he learned that Gardner had it. A line was thrown him, which he made fast about his waist, and by this he was hauled through the water and up the side of the launch. The boat was then picked up, while a fisherman who had

rowed out began to gather the wreckage, which was now spread over several acres of the channel. This accomplished, we started for Avalon. We were hardly under way when I thought of a fine rod and valuable reel now at the bottom of the bay with other things. At that moment Gardner reached down and discovered a hook that was fastened to his trousers. To the hook was attached a line, and the launch being stopped, Gardner hauled in nearly six hundred feet of a twenty-one thread line, attached to which were my rod and reel that had been down to the bottom of the bay somewhere. In the flurry the hook had become detached from the tuna and had caught in Gardner's clothing, and he had towed it as well as the fish.

The tuna weighed but ninety-five pounds. It hangs on my study wall — a silent partner in one of the most remarkable fish experiences it was ever my fortune to hear of, much less be a party to, and it is an excellent illustration of the cleverness and pluck of California boatmen and gaffers. How many men would have held a bleeding tuna a mile out in a channel where sharks were known to be in evidence around the tuna schools ; held a fish powerful enough to drag a man under water? Not many, I venture to say. This realistic angling drama made Jim justly famous.

From these accounts it might be assumed that many tunas have been caught, but up to date but

forty men are entitled to wear the blue button of the Tuna Club, showing that they have taken a one hundred pound fish. This does not mean that the fish do not bite well, as hundreds have been hooked and eluded the lure in skilled as well as untutored hands.

There is a charm about this strenuous sport difficult to explain. The soft and constant winds, the cool air in summer, the splendid blue of the Santa Catalina Channel, the contrast of rock and sea, the perfect calm of the bay, the romance of the island, all combine perhaps in making the chase of the elusive tuna one of the most interesting of pastimes. In the evening, when the moon rises out of the sea, I stroll away from camp, climb the side of the cañon by one of the many sheep trails, and reaching the divide, look down on the silent summer sea, then turn and trace the dark winding cañon that reaches up to the distant mountains like a great sinuous snake. Somewhere, perhaps not far away, is the temple of Chinigchinch. I may stumble upon it some time by merest accident. Then I descend and join the group around the camp fire, the men barbecuing wild goat over the coals for *cbili con carne*. I ask Mexican Joe if he thinks the temple is up the cañon, to which he replies encouragingly, "It's up tha' somewhar."

CHAPTER XV

AN OCEAN DUEL

The California Spearfish. Its Gamy Play. Whales and their Vagaries. Orcas or Killers. Remarkable Phosphorescent Display. Bonito Fishing. The Dolphin.

I THINK I hooked a swordfish this morning. I have caught so many of the large fishes that I fancy I know their ways, but this was something new. It was very short and sensational, but Neal, the boatman, assured me that I had a "run for my money." But my new line is now streaming from the lips of some sea monster, as, having escaped, it of course *was a monster.*

Something struck savagely, jerked my tip into and under the water; there was a *b-r-r-r-r-r*, and six hundred feet of line went, and the fish remained on the surface. I have no actual reason to think it was a swordfish except that I have been hoping for a strike, and have seen several swordfishes. Yesterday I saw one leap clear of the water a short distance away. It was a dismal leap, the fish falling back, producing a heavy splash. If it had been in the lagoon in Florida, I should have said that a shark was chasing it, but they leap so often here that I fancy it is merely in play.

I found a large sword (or spear) fish at the head of Catalina Harbor to-day. It had been killed in a duel and was pierced several times,—doubtless killed by a *Xiphias*, which has a longer sword. One thrust went through at the gills, another entered the eye, and a third shot up through the body amidships. It was a fine fish, a type of strength and energy,—heavy, thickset, and powerful, a living ram; and its sword, or rapier, was broken at the tip, splintered on its antagonist. It proved to be a spear-fish, *Tetrapturus*, and a fisherman came in later with the other, a *Xiphias*. He witnessed the fight, and said that in its savagery it equaled a bull-fight or a fight between two bull-dogs. The two fishes swam in a circle, watching for an opening, and came together with a crash. They fought half an hour, when one, being wounded, swam off to die, while the other, also badly wounded, was harpooned. I saw its skull, and had it photographed to show the wounds; one glanced along the head. It was badly cut about the body, and would have died.

This has been a notable season for swordfish, but none have fallen to my rod. A professional fisherman told me that he saw a school of hundreds to the westward, and it is possible that they spawn here; but a small one has never been found. The case seems identical with that of the New England coast. The fish is very common there, but I never found a fisherman who had seen a small one; they breed in the Mediterranean.

The first swordfish taken with a rod at the island came in recently, and I had the pleasure of hearing its story. It was taken by a Mr. E. B. Llewellyn of Chicago, who stated that the fish made a fine fight and established its reputation as a thoroughly game fish. It fought hard ; its movements were exceedingly rapid, and it repeatedly went into the air, striking from side to side, falling heavily, and fighting the angler nearly an hour. Later another was hooked by another party, the swordfish making so threatening a play that the angler became demoralized. The fish, which was about ten feet in length, went high into the air on being hooked, then made a rush, which consisted of a succession of leaps, clumsily made, yet displaying its sharp rapier, which gleamed in the sun, a menacing weapon. The fish made a half-circle two hundred feet from the boat, then, when pressed hard and checked strongly, turned and came at the launch at full speed.

The movement was so menacing that the angler sprang to his feet, reeling hard, and gave the word to go ahead. As the boatman grasped the lever and the launch bounded into action, the big fish shot by her, missing the stern by about a foot. The fish may not have intended to ram the launch, but the angler unfortunately, but possibly wisely, considered discretion the better part of valor, and cut his line, and the launch was sent inshore at full speed.

Here an excellent opportunity to determine whether a hooked swordfish would ram a boat was lost. I did not hook the fish, and did not see it, but it is so easy to express an opinion about matters which one knows nothing about, that I am tempted to say that the fish did not intend to strike the boat. Fear, not rage, animates such game,—at least such is my opinion; yet the late Colonel Nicholas Pike told me that the large sailfishes of the Indian Ocean have been known to attack pirogues and sink them, and that it was the belief among the natives that when a fish was attacked, its companions came to its rescue. I should want ocular demonstration of this. I have grained black or nurse sharks in shallow water, and had them tow me in the water, while the remainder of the school was dashing to and fro all about me. A looker-on, not knowing the game, would have said that as the sharks swam at me, and actually hit my legs in some instances, they were attacking me, while the truth was that they were merely darting about in blind fear. I do not mean to disparage the swordfish as an antagonist, as there is not a week in the year but some boat or ship is struck by one in some sea.

Some of the wags of the little town of Avalon created a sensation to-day by waiting on a visitor, who had stepped from the boat wearing a high silk hat, and reading what they claimed to be a law relating to the use of "plug hats" on the high seas,

or any contiguous territory, on the island of Santa Catalina.

"Gentlemen," said the astounded tourist, whose hat certainly was of an obscure and ancient design, "I have traveled widely, but I have never heard of such an outrageous law; and yet you call this a free country." (The stranger was a Canadian.)

"This is a precedent handed down from the old Indian chiefs of the island," explained the spokesmen. "They did not wear plug hats, at least in summer, and out of deference to them the plug hat is not allowed here. We merely wish to acquaint you with the rule, and to notify you that we will not be responsible for any damage done to you or to the hat."

The amazed tourist was so impressed that he purchased a straw hat, and carried the offending article around in a brown paper bag during the rest of the day.

This island is remarkable for the variety of fishes taken here. To-day a splendid specimen of the Opha was brought in; it was harpooned on the south end of the island. It is one of the most beautiful fishes that swim: nearly oval, with rich vermillion fins, a beautiful eye, and a silvery diaphanous skin, over which seems to be drawn a veil of old-rose-colored lace, the entire surface being dotted with splashes of vivid silver and black. Several specimens of the ribbon fish have

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been found, very rare anywhere; a fish which is doubtless the sea serpent, its red, plume-like dorsal being the mane that is so often described. Several large fishes, common in the Hawaiian Islands, have been taken; and I have found alongshore the paper nautilus and a number of lampfishes having a phosphorescent spot above the eyes. The numerous mother-of-pearl spots along the ventral surface, it is supposed, are luminous, but I have failed to notice it. The latter fish are deep-sea forms that only occasionally come to the surface. To-day a fisherman brought in a good-sized bottle-nosed dolphin,—the mammal, not the fish, though the latter is also caught here, and is a fine game fish. I can testify to this, having taken it in the South Atlantic, and grained it from the dolphin-striker of the ship. The bottle-nosed dolphin was taken on a hand line, in trolling for yellowtail, and made a vigorous fight. One of the boatmen hooked a young killer, or orca, a few days ago. The animal, eight or ten feet in length, jumped clear of the water, and broke the line.

These powerful animals interest me very much, and I spent one day following the school and a big seventy-foot whale about, trying to photograph them. We had a party on the launch at the first attempt, and I stationed myself in the bow, camera in hand, and told the helmsman to get as near as possible. The whale was a sulphur-bottom.

I first sighted it a mile off, as it made a stupendous leap, rising so slowly that when I saw it, it appeared like a mountain or a hill, then I observed that it was literally standing on its tail. We caught up with another later, and I succeeded in obtaining a picture of the spout. The boatman put us almost directly over the tail of another, when, the ladies becoming alarmed, we were forced to give it up. I confess that it was somewhat of a strain on the nerves to look down and see the water boiling, as though in a cauldron, and realize that it was caused by the slow but mighty movement of the whale's tail. The animal doubtless knew that we were following, as it did not come up when we were near; but the spouting made an excellent picture of spray.

While we were following this whale a procession of orcas appeared. They swam in a line, a very large individual ahead of the company. The dorsal was high and large, like a lateen sail, the body jet black, like black marble, while in front of the dorsal fin was a perfect saddle of pale lavender, and there was also a large oblong spot of the same hue beneath each eye. No more striking animal can be imagined than this tiger of the sea, that kills large whales and attacks animals of all kinds.

A battle between a pack of these killers and a large gray whale was observed off Avalon by a friend, who stated that he saw the whale, sixty

or more feet in length, rise out of the sea and almost clear the water, the killers clinging to it like hounds to a bear. His boat was some distance away, yet the water about it soon became colored with blood. The killers devoted their attacks to the head, tearing the great lips aside and attacking the tongue of the helpless whale, which lay on the water, beating it into foam with its massive tail.

He described the sight as typifying carnage, an illustration of the abject helplessness of an animal sixty or seventy feet long and weighing tons before the combined attack of small-toothed cannibalistic whales. The orcas dodged its blows, leaped over its back in the air, and finally fought the giant to a standstill, ultimately dragging it down out of sight.

No better locality could be found in which to study whales than this mighty cañon forming the Santa Catalina Channel. The steamer Hermosa has struck several that happened to rise just before her.

The shock on one occasion nearly overthrew the passengers as the cutwater rammed the ponderous body ; the steamer seemed to rise upon the whale, inflicting a fatal wound, the dead animal being found some days later stranded upon the beach, where it attracted thousands of sight-seers from the inland towns. The whales are often curious and follow alongside the vessel. An acquaint-

ance, president of a Los Angeles bank, came into port not long since and told me that when he was becalmed six or eight miles offshore, a school of whales literally surrounded the yacht, lying alongside so near that the spouting was very disagreeable. The whales evidently thought the yacht one of their own kind, and he said that some of his crew were badly frightened by the proximity of the sea monsters.

The captain of the steamship *Hermosa* told me that for over a week a school of whales took up their position some distance to the south of his daily course and amused themselves gamboling and swimming in a circle, the men calling it a "whale convention."

The channel is remarkable for its jelly-fishes, the natural food of the whalebone whales. I have seen the blue waters for miles dotted and filled with beautiful jelly-fishes. Some are over a foot across, marked with dark lavender tints, with tentacles twenty or thirty feet in length; and looking down one can imagine the sea to be the atmosphere, and the giant jellies comets shooting across the sky.

At night this is illustrated in a striking way, as many are highly phosphorescent, and become comets in appearance. Not long since I ran into an area of *Salpae*, through which we steamed for half a mile. The jelly-like animals, singly and in chains, were of very large size, and were so

thick that they were pushed out of the water, the top layer projecting far enough to catch the sun's rays, making the whole mass scintillate and gleam in a marvelous manner. They were present in such vast numbers that at random I dipped up a solid bucketful. Here was a feast for whales, which had but to open their capacious mouths, swim ahead, and engulf them by the ton. An estimate of the number of such animals is impossible, as it is not known to what depth they extended; but a member of our party with a mathematical turn of mind gave us as a result of his figuring that in a cubic mile of the Santa Catalina Channel we passed over, there were 500,000,000,-000,000,000,000 individual *Salpae*, not to speak of hundreds of billions of jelly-fishes. The water in the outer channel has a tint that in its peculiar quality is not describable,—a pure, flawless blue; but by using a water glass and placing my eyes near the surface I found that it was filled with minute creatures, delicate *Medusae*, myriads of *Noctilucae*, fairy shapes of *Beroë*, *Circe*, and many more, while the microscope revealed myriads untold, demonstrating that each drop of water was the home of countless diatoms and other minute forms.

One of the most interesting of the smaller animals, because of its phosphorescence, was the *Peridinium*. I hesitate to describe a spectacle I observed in this summer sea. For some days the

fishermen had reported "red water" on the mainland side. We ran over to it, and found that it extended from San Diego to Santa Barbara, a distance of two hundred miles, more or less, and was from one to ten miles wide. The water looked as though brick dust had been poured into it, and the tint was almost as pronounced as the reddish mud that reaches the sea from the Rio Grande, and ruins so many days of tarpon fishing along-shore near Aransas and Corpus Christi.

I estimated roughly that there were one thousand square miles of this reddish water, and doubtless this is a low estimate; but it will afford an idea of the vast volume of animal life that filled this channel, as the red water was caused by the minute infusorian *Peridinium*.

I went ashore at the town of Long Beach, and as night came on, and the wind freshened, became witness to one of the most remarkable spectacles I had even seen. The *Peridinium* is vividly phosphorescent, and to one standing on the pier, the sight several hundred feet out among the breakers was astounding, and I could well understand the effect upon ignorant people. As far as the eye could see toward the island the sea was a blaze of silver light, and where the waves broke, it was intensified. If oil had been poured on the water and ignited, the effect could not have been more wonderful; and where the surf broke upon the sands there was a magnificent band of light which

could be traced for miles and miles up and down the coast. I have watched and studied the phosphorescence of sea animals in many waters, but I have never seen any that approached this in its spectacular display. Where the waves came up on the beach and withdrew, every footstep was outlined in fire, and even above the water, where it had splashed the hard sand, I could write my name in lines of vivid light, and if I scooped up a handful of sand and threw it at a board, it turned to gold at the contact. A dog trotting along the beach had the gift of Midas, every footprint leaving a golden imprint; and to do justice to the wonderful display would be impossible.

The effect upon the populace was no less interesting. It appeared to be the general belief that an earthquake had released some luminous matter, the "red water," and men, women, and children who could reach the ocean by carriage or train came to gaze with wonder at the greatest display of phosphorescence ever witnessed in Southern California.

This exhibition lasted several weeks,—came in and out in a singular manner, not altogether dependent upon the tide. It was disastrous to the mainland shore fisheries; and the odor of the dead animals was offensive in the extreme. The *Peridinium* is not phosphorescent unless irritated. I carried a bottle of the water to the island,

whose coast was almost free from it, and as it stood in the tent no light could be seen; but when I shook the bottle vigorously it became a blaze of light sufficient to enable me to determine the time by my watch.

There are three distinct areas of fishing here: the kelp beds that skirt the shore, the area from twenty to two hundred feet offshore in water one or two hundred feet deep, virtually the slope of the mountain, and the channel from one to five miles off Avalon Bay,—each having its peculiar fishes. Thus in the kelp would be the kelpfishes, the beautiful Irridio—with its lovely eyes and its charms of color, calling to mind the parrot fishes of the gulf,—the sheepshead, the giant black sea-bass, whitefish, and various perch. Out further was the highway of the yellowtail and the white sea-bass and the barracuda, while offshore roamed the albacore, Spanish mackerel, and two kinds of bonito, the tuna also being found there, but dashing inshore to prey on the schools of fishes in the bays.

Yesterday we ran the launch into a little protected bay and began to cast for yellowtails with some success; but suddenly a school of skipjacks, as the men call them, or bonito, came darting in, a vivacious fish so rapid in its movements that I could think of nothing but the ten-pounder. I changed tackle at once, taking a light black-bass green-heart rod, rather heavy, possibly, which I

had made for the rock-bass of this region. Mexican Joe produced some very small sardines, and baiting with one, I cast out into the deep blue water, down in which the shadowy forms of the great kelp leaves could be dimly seen. The moment that the bait fell I reeled rapidly to simulate a live fish. Several bonitos dashed at it, coming from somewhere out of the blue depths of the sea. Their action was identical with that of a tuna,—the bait was taken on the run, the fish never stopping or hesitating, but seizing it and darting away.

The strike was almost irresistible, the rod bending to the danger point in an attractive curve, the small reel singing in shrill staccato. Out straight away went the fish, with a rush so quick that he could not be followed. One hundred feet he gained in a single bound; then stopped and came around in a perfect circle, always just on the surface. No sulker he; dashing on and on until he reached the kelp bed, during which I gained my feet, then he turned and came at the boat like a rocket, like an arrow from the bow, and Joe lay back and laughed and laughed again at my efforts to take in the slack that this little fish made for me. But it was impossible, so I pushed on the brake and let it go, then stopped it again. The little bonito never surrendered, and I fear that my rod was a little too heavy, and that I had him at a disadvantage, as in ten minutes I brought him to

gaff and Joe lifted in what is virtually the hummingbird of the sea,— a blaze of colors, an iridescent scintillating creature, so radiant and beautiful that I almost regretted having caught it.

CHAPTER XVI

THE DELIGHT-MAKERS

The Interior. A Cave-Dweller's Home. Black Earth.

*The White Sea-Bass. Camp-fire Yarns. Johnny
Daly. The Mounds and Ancient People
of the Channel Islands.*

We climbed the cañon last night on some horses sent from Avalon, followed the steepest trail I ever rode over, and spent the night in Middle Ranch Cañon at the foot of the Cabrillo mountains. A splendid slope of green faced my tent; near by a clump of cottonwood towered aloft, and by the tent door flowed a musical brook which Adargo, one of the guides, tells me never fails. We are on the south slope of the island, and as I listened there came a deep, sonorous sound, a melody sweet as that rippling from some gigantic æolian harp. Now it was strong and distinct; then sweet and low, dying away, to come again and again with varying cadence. It was the booming of the distant sea, wafted up the long sinuous cañon, finding its way on the west wind to the very heart of the island, telling of the different conditions which hold on that side, where, instead of calms and seas of glass, the wide ocean

beats against the lofty cliffs and vents its fury on jagged rocks.

We had at last reached the passable country of Chinigchinich and the temple. It had lured me up out of the deep wooded cañons along the base of the mountains. Mexican Joe had vowed by all the gods, including Chinigchinich, whom I fancy his ancestors worshiped, that he would take me to a prehistoric cavern, to a ledge where all the stone dishes, bowls, and vessels for which ancient California was famous, were made; would show me an ancient burying-ground, a kitchen-midden, a mound where bones and shells and implements of many kinds lie cheek by jowl; and if all this, why not the temple? On this point Joe was silent; but I noted that he had never denied the possibility that we might come upon it in some secluded cañon.

I fear I had some of my plumed serenaders for breakfast, as broiled quail was the *pièce de résistance*. At nine we mounted the mustangs and filed down the cañon. Every day was delightful here,—cool, never hot; and there was something about the place that appealed to me. Half a mile down the cañon, we turned to the right, climbed the slope of a spur of Mount Orizaba, and reaching nearly to the divide, came to a lofty mass of rock beneath which was a small cave; its floor, made of black earth, telling of ancient occupation. A huge patch of cactus grew in front, covering a

large mound of abalone shells which the ancients had brought up from the sea to make into the many articles and ornaments, as well as fish-hooks, which they used. On the face of the cave were strange markings in red; and later, when yellow-tail-fishing at the cave of Torqua, Mexican Joe showed me the ledge from which the natives took their red paint.

In the floor of this cave, which had given shelter to many a Catalinian, centuries ago, I found strange objects in stone. From here we descended into Cottonwood Cañon, following it to the northwest. Cactus, cottonwoods, ironwood, holly, manzanita, wild lilacs, the wild tobacco tree of the natives, and bushes of many kinds covered with clematis barred the way, and everywhere flocks of quail rose, adding the roar of their wings to the clanking of hoofs. In a short time we came to ledges of steatite and verd antique projecting from the ground, and many had been chiseled by the ancients. One bore a ball the size of a man's head in high relief; another a mortar or bowl partly worked out, while there were many scars where such objects had been broken off.

Pushing on, we came out on the divide and to a mountain of steatite where, half covered with cactus, we saw the scars and remains of many mortars in various stages of completion. One might imagine that these people had been attacked and suddenly driven away, as in the soil, buried or

partly so, were mortars and implements; indeed the region proved to be of great interest. It was an ancient *olla* manufactory, and here were made all the steatite vessels and bowls found at every camp and graveyard on the mainland. The ancient and unknown Californians had made and carried them to the populous towns on the mainland shore where Wilmington, Redondo, and Santa Monica now stand, and traded them for deer-skins and certain things that were not produced on the island. To-day this ancient ledge is a valuable verd antique quarry, and some of the finest buildings in Los Angeles are decorated with the stone.

The trail from this point along the base of Mount Black Jack in the direction of camp was rich in fine views. In some places a slip meant a slide of a thousand feet, as the trail was a mere wild-goat trail, a ridge on the slope of this precipitous cliff, and the view was always down into a green abyss of some cañon and off over the deep blue waters of the Kuroshiwō, beyond which rose the snow-capped peaks of San Antonio in the Sierra Madre. We skirted the island shore one thousand feet above the water for five or six miles, opening up cañon after cañon, and finally reached a vast basin down into which on the edge of the sea the white tents of our camp gleamed a welcome. All these islands must within five or six hundred years have possessed an extensive popu-

lation, as everywhere alongshore, in every bay and cañon, on the summits and slopes of the mountains, in the eyrie of the wild goat and eagle, I found evidences of the ancient owners of the land. Perhaps it was a shell, a bead, a number of arrow points, a grinding-stone or spearhead or pipe telling of the early days and of the people who have been utterly wiped out of existence. Few localities offered better inducements for life and pleasure to a native race. The sea teems with fish and shell-fish, and wild tobacco and various edible plants are found in the interior; squirrels and foxes abound, and birds of many kinds. Nature offered a bounteous supply to these savages, yet they disappeared as though some cataclysm had exterminated them.

The drop down from the ridge into our cañon was precipitous, yet the well-trained horses took the trail like goats and made the descent with ease. I found C—— on the beach taking a siesta, from which he awoke to ask if I had found the temple. Mexican Joe, who was taking a goat from my saddle, said, "No, but we find him yet." Oh, the faith and optimism of these natives at five dollars a day and found!

We heard a tale of sea-bass entering the little bay, sailing along the shore in rows and platoons, and having figured out the time, Mexican Joe said that we should find them at Cabrillo Bay in the morning. Joe was a truthful prophet. I started early in the launch and followed the shore to

Long Point, then to Empire. High cliffs deeply colored, great slopes racing up to mountains, hidden in the blue haze and open bays, passed by as we moved along ; sea lions were piled on whitened rocks, and far to the north the strange phantom ship, Ship Rock, hove in sight under full sail. We had just turned into Cabrillo Bay when my reel sang high, *ze-e-ze-e-e-e!* and the rod bent low, while some powerful fish gathered in the line. I noticed that it did not sulk though in deep water, — water so blue, so deeply blue, that there was no name for it.

"White sea-bass," said Mexican Joe, "an' a dandy!"

The fish made a run of perhaps one hundred and fifty feet and swung the stern of the launch hard around before I stopped and held it by the quivering rod. It is at this psychological moment that the sport in sea angling reaches its acute stage, when the angler stops the run, and with trembling hands, and all his senses keyed to the highest tension, holds the fierce and struggling game, and feels the thrill of mastery. The fish has all the advantage : the line is so fine that the slightest jerk will break it ; any mistake in pressure on the brake, any error of judgment caused by over-excitement, and the game is up. The delicate line, a mere thread, thrills and throbs like the string of some musical instrument. It stands like a wire of steel and holds the game in a grasp

of iron. For a second the bass is stopped and away off lashes the water, then turns and plunges down, taking more line. The fish headed inshore, and I saw that it was trying to follow the school, and at Joe's suggestion I stood and glanced over-board to see the sight of my life. The blue water, with its constellations of jelly-fishes, was alive with white sea-bass, fishes of rich and radiant tints four and five feet in length, none weighing less than forty or fifty pounds. They paid no attention to the launch, but moved into the bay in a dignified manner, a sight to arouse the enthusiasm of the most phlegmatic angler.

The bass played me at least fifteen minutes, making splendid lateral runs; now at the top of its speed, to turn suddenly and rush away, or bear off in a great circle about the boat, evidently trying a score of tricks to confuse the angler and escape. The reel was always screaming, protesting, and the procession of fifty-pounders still passed beneath and on both sides of us. With Florida grains I could have taken a score, if indeed I could have found it in my heart to kill the big, trustful fishes. The bass now played entirely on the surface, and I was forced to go around the mast of the launch several times as it swept in great circles. Then it began to come in as the reel continued its deadly work, sweeping around the quarter, tipped slightly upward to show its white belly in the sunlight; then was gaffed, held

a moment in the flurry, tossing the water in air, to come in a thing of beauty, a piscatorial joy forever.

"Ain't he a Jim dandy?" cried Mexican Joe, bracing, and lifting the splendid creature by a powerful effort, holding it up that I might feast my eyes upon it.

There was no question as to that, and while the white sea-bass is not a spectacular fish, has no gorgeous colors, it is really beautiful. The upper surface is a greenish brown or gray, iridescent in the sunlight, and about the head, which is small, of the weakfish type, it has all the tints of the peacock blue and presents a dazzling appearance. The fish was five feet four inches in length, and the next day weighed fifty-two pounds; and this appeared to be the average weight of these fishes. None that I have caught here weighed less than fifty, and some taken by others have weighed eighty pounds,—the maximum weight of the bass, which is a Pacific weakfish, *Cynoscion nobile*, being much over one hundred pounds.

The fish stowed away in the canvas, we followed the school in, and leaving the launch I went ashore, and had fine sport from the beach. Casting from the shore has a charm peculiarly its own, and this was of an æsthetic nature. There was no wading out or being towed into deep water, or stumbling over dead coral. We lay on the sands until the school came in sight, following the beach line. Some were on the surface and had

their dorsal fins out as signals to come on ; and I could see their graceful forms outlined against the sand. Running down to the water's edge, there being very little sea here, I cast my big smelt bait far out into the bay, intending to reel it in across the school ; but the moment it struck the water there was a swirl, a mighty overturning, and the slender rod bent to the buckling point, the reel sang high, sang low, and Neal, the boatman, and I pranced down that sandy highway of the fishes, again running back ; now hauled down shore to the loud and trenchant acclaim of the click, then back, to reel hard and quick to see it all go with a blare of reel music. This was angling of a specious quality. The fine, wide beach as a stage, the hills on either side rising like an amphitheatre, the glasslike bay, the swish of the water as it was cut by the line, the vibrant music of the reel, the rushes to and fro, the hearty laughter of the lookers-on who were betting on the fish, all made up an animated picture rich in color and action.

I had no easy task, and without a clever gaffer doubtless would have lost my game, as it took me down the beach and bore away in the most strenuous fashion ; but in the end I won, reeled it slowly in, when Neal waded out, gaffed it deftly, and bore it inshore in triumph, another fifty-pounder or thereabouts. If a salmon ever put up a better fight I envy the angler ; but no salmon rod of my acquaintance could have mastered this

noble white sea-bass that with a long, light rod of the salmon class could have fought and defied capture for hours. For two or three days this splendid school of bass held forth in Cabrillo Bay, affording various anglers the sport of their lives ; then they moved on, and like a fleet of cruisers, sailed on up the coast.

While we fished Mexican Joe and Adargo arranged for a barbecue and crayfish bake combined ; and at noon we collected on the beach to dine with the gods and incidentally to exchange experiences.

Our party and a number of visiting anglers had taken fifteen or twenty white sea-bass, none of which were under fifty pounds, making a fine showing when I add that none had been unfairly taken, all played with the small lines indicated, mine being in this instance an Abbey and Imbrie rod and a No. 15 Irish linen line tested to pull a dead weight of thirty pounds. I have taken these fishes with a No. 12 line tested to pull a dead weight of but twenty-four pounds. The following shows the merits of a typical good line for sea angling :—

No. 12, tested to pull dead weight of 24 lbs.

15, " " 30

18, " " 36

21, " " 42

24, largest allowed by Tuna Club, 48

In shallow water where there is no sulking, no pumping and lifting, the angler can take a fifty-pound fish with the No. 9, provided he has an

abundance of it; and I used from two to six hundred feet.

The joys of angling are one thing, the joys of the barbecue are another. The men had dug a large hole, paved it with stones, and heated them to a white heat. On seaweed they had cooked abalone and crayfish (spiny lobster), while a big bass and yellowtail had been baked and served whole. Lucullus was not there, but his envious shade, with that of Epicurus, must have been in the air filled with aromas of abalone chowder, crisp bacon, lobster, and the bouquet of chablis, not to speak of *cbili con carne*, *cbili colorado*, and many dishes of minor importance. But the *pièce de résistance* of the feast was the afternoon yarns when cigars and pipes were lighted, when Johnny Daly, the king of the north island, and professional sharker, related his stories about the haunted ship and swore by all the powers that he had seen Ship Rock get under way. Later Johnny invited us over to his shanty across the isthmus to a shark-fishing contest, where I landed a small tiger-marked shark six feet in length weighing sixty-eight pounds. We lined up on the beach of the fiord, one of the best natural harbors on the coast of California, and baited with three or four or five pounds of fish, which the accommodating Mr. Daly rowed out fifty feet and dropped over, the bait being too heavy to cast on the light lines. In less than five minutes I had a strike, and to my delight up into

the air went a long, streaked shark, lashing the air and hurling the spray,— the leaping shark of Cabrillo. My neighbor had a strike at the same time and broke his rod in his hand. My fish carried me up the pebbly beach, making a fine fight, leaping occasionally, and fighting the inevitable for half an hour, when Johnny waded in and gaffed it.

The upper end of this bay appeared to be a breeding-place for these sharks, and I later saw them there in great numbers, fins out of water, moving about in the thick mud not ten feet from shore.

Johnny Daly, the gaffer and bait provider, was a character, and between him and an Irishman named O'Grady there was a passing and repassing of yarns that for size and classic amplification could not be equaled. That night we gathered on the beach by a big log fire and invited the men to join us, hearing various tales about Johnny Daly from O'Grady, where to separate fact from fiction would require a Solomon with mind of a Poplicola. The talk fell on luck, fisherman's luck and poetry.

"You did n't know that Johnny Daly was a poet," said O'Grady, whirling his line-drier. "No more did I till I wint over to his place to borrow a sup of whiskey — but the bottle was impty, and corked up in it was this poem. There's no doubt what the inspiration was : you can smell it on the paper sure, but it tells the story of a day's fishin', all right. D'ye s'pose he wrote it? It

luks to me as though Mister Kipling had been fishin' with Johnny and had paid him in poetry, or perhaps it was Ella Wheeler Wilcox — she was over here. Sure, he's jest that aisy with the women, he'd row one all day and take a poem if he thought she writ it. There's romance in Daly. Here's the poem :—

THE GAFFER'S SONG

Can you see the red beams rising on the bar,
And the crimp-edged olive kelp leaves in the sun ?
Can you see the tides a-washing,
Every beach and reef and crossing,
While the wrack-grown rocks are sinking one by one ?

Can you see the black-fog creeping o'er the lea,
And the gilt-edged purple caftions yawning wide ?
Can you see the white gulls playing,
Where the bull sea cubs are baying
On the black rocks, all a-swirling in the tide ?

Now you pay out, overrun or overreel,
And the long bronzed jointed leader has its turn.
How it cuts the azure tide rip,
Now it severs some sea light-ship,
As it follows gleaming brightly far astern !

Did you see that knife-like fin¹ — five foot two ?
And the lavender half-circle on its back ?
Did you see the darn come rushing,
And the maelstrom sea a-flushing,
As the sunlight came a-blazing on its track ?

¹ Orca.

Did you see its coal-black skin, without a flaw ?
And the yellow spume that looked like mermaid's hair ?
Did you see its dark eyes gleaming,
And remoras on it streaming,
As it flung itself high up into the air ?

Over yonder in the eddy there 's a swirl.
Don't you see the fin of sea-bass in the spume ?
Catch the glint of golden scale flicks,
Hear the sob of ghostly reel clicks,
As the fish turns quickly off the shore for room.

Fifty yards of well-stretched hemp line, running out,
Singing, screaming, backward reeling on the sea of foam.
Now 't is sounding, reel resounding,
Then there comes a mystic pounding
From the deep, deep abysmal fishes' home.

In it comes, but always fighting, to the gaff,
Dashing madly to the steel-voiced music of the reel.
But in its shadow swims a sea mate,
Shark voracious, ugly, ingrate,
Plunging, striking, biting for its meal.

Then the gaffer sinks his gaff pole in the sea;
And the angler, quick responding to the sign,
Reels it short, and gives the butt,
While the bass sags on the gut;
Then it leaves that maddened angler all his line.

"I'm a great belaver in luck," remarked O'Grady as he concluded, "and I said to meself this mornin', 'I'll go out for luck ;' and it's like findin' three dollars to pick up you gentlemen off the rock."

" You ought to have good luck all the time," said one of the anglers, as he unreeled his delicate line to dry it ; " no rivals in business."

" None but Johnny Daly and Romanaldo, and he's off half the time," replied O'Grady, " but Daly gets his share. He don't get left, but he gets what 's left ; still, he tells the people he 's the rale thing and that I 'm his understudy. Yes, that 's the very word he uses. He never said it to me face, and I 've never taken exception to it, or made up me mind whether it 's offinsive or inof-
finsive ; and, after all, it 's a question of intintion. D 'ye mind the young Irishman who went through the cathedral of Notre Dame ? He was taken all around by an old friend, Father McMann, and never said a word. When they were goin' out Father McMann says : ' Well, Pat, what d 'ye think of it ? ' ' It baits the devil,' says Pat. ' That 's the intintion,' says Father McMann. So," continued O'Grady, " it may be Johnny Daly's in-
tintion to quare my luck ; but he 's that pompious in his way, that I 'm not sure but what he thinks he 's payin' me a compliment in callin' me his understudy. He 's an astute man, is Daly."

" He 's certainly overreaching you in the matter of cards," said an angler, taking one out of a pocket of his jacket and passing it over.

" Johnny Daly, B. A., Pioneer Oarsman and Guide," read O'Grady.

" Is Johnny Daly a B. A. ? " asked the angler.

"Well," said O'Grady, "he's a bachelor, and he's that artful that he keeps alive; but he's not educated at all; it's his natural wit. But he came by the B. A. all right; it's no degree; he's paid to use it."

"Paid?" repeated the angler.

"Yes, he's regularly hired. It's a long story. You remember Tony Romanaldo's mother, the old woman that lived at Empire? Well, wan summer she came up here and camped, and brought a cow, a good thing to see when you've been livin' on condensed milk for tin years. But not a drop of milk did we get, divil a drop; and when Johnny approached the old woman, she says, 'Mister Daly, if you want milk, why don't you invist in a cow?' With that a great white light crept into his head and Daly says, 'All right, I'll buy one half interest in the cow.' If there's one weakness Johnny has, it's for the sex, and he's that polite that it's good he's off on an island away from women, and that's where Mrs. Romanaldo nailed him. 'All right,' she says, 'I'll sell you half interest; what haf'll ye take?' 'Take your choice, marm,' says Daly, overreachin' himself, and thinkin' it was jes' the politeness of the old creature. 'Well, you're very polite, Mr. Daly,' says she; 'I'll take the stern sheets.' 'And I'll take the bow ind,' says Johnny with a laugh. The way I found it out was, he came over and borrowed twenty dollars of me, and to secure me he got a

bill of sale, which read this way: ‘Sold to Mr. Johnny Daly the bow ind of me cow for twenty dollars.’ On the back of this he wrote a note for twenty dollars, interest to be paid in milk at seven per cent per week.

“‘Can you milk, Johnny?’ said I. ‘I belave I can,’ says he; ‘I’ve observed the operation, and it’s much like pumpin’ out a lakin’ boat. But that’s no impidiment; the old woman’s to milk and see to the cow.’ That seemed satisfactory, so I gave him the coin and says, ‘If ye’re out to-night, jest bring me down a sup av that interest in a cup.’ ‘I will,’ says he, ‘and,’ says he, ‘have ye any of that old whiskey?’ ‘I have,’ said I; ‘it’s many a day since I’ve had milk punch; we’ll have it to-night.’

“Along about nine o’clock I heard him comin’, and in a minute in he walked an’ set down with never a word and no milk. ‘Are ye sick?’ said I. ‘Na, only slightly duddy,’ says he. ‘Let me see the cow bill of sale,’ says he. I pulled it out, and he looked at it for a long time, and finally he said, ‘O’Grady, I’ve been decaved, and by a woman.’ ‘And me twenty dollars?’ says I. ‘She has it,’ says he. ‘Listen. Ye know the full particulars of the transaction. When I went there to-night with me pail she says, “What can I do for you, Mr. Daly?” “I come for me milk,” says I. “Sure, you’re jokin’,” says she. “Jokin’?” says I; “Did n’t I pay twinty dollars for a share in it?”

"Not in the milk," says she. "How's that?" says I. "Did n't I give ye your pick and ye chose the bow ind of the cow?" says she. I was struck dumb, O'Grady, by the convincement of her argymint; I niver said a word. "The milk ind is mine, by your choosin', Mr. Daly," says she, "and the head ind is yours by your choosin', and I hope ye'll attind to the feedin'. The mouth is on your possessions, Mr. Daly, and I'd like ye to sind round some alfalfa to-night."

"And what did ye do?" I asked. "I walked off," says he. Well, to make a long story short, that old woman got all the milk. But one day a lawyer came fishin' with Johnny and heard the story, and Johnny gave him such a day's fishin' that he was ready to do anything. They caught sixty yellowtails in one day, and whin they came to settle up Johnny says, 'I 'll call it square if ye'll go up and see the old woman and settle the case;' so he did. He was one of these big blusterin' kind of chaps, and he walks up with a bundle of papers and nearly scared the life out of the old woman; said he would have to take her to Los Angeles as a witness, and the cow as a witness, and that it would go hard with her. She was willing to give back the twenty dollars, but she had spint it; so the lawyer made her sign another contract that Johnny suggested on a pointer I gave him. 'My client,' says he, 'will be satisfied with the starboard side of the

cow, each party to contribute to the support of his half.' So in that way they settled it; but the trouble didn't end there. Down came Johnny Daly that night, and he looked as though he had been in a fight. 'O'Grady,' said he, 'how in the devil's name did ye come to select the starboard side of the cow? It's the port side that the milkin' 's done on.' 'Is that so?' says I. 'It is,' says he, 'and I 'm surprised that a man of your ginerel inquiration did n't know it. I started in to milk the cow,' says he, 'and the cow lept over me head, and the old witch said that if I got on her side she 'd sue me for trespass.' But the lawyer was there, and between you and me he 'd stayed there to see it out, and they fixed it up so that after a while Johnny got his milk. Whin the lawyer left he said, 'Johnny, I 'll send ye some cards when I go back, and I 'll not charge ye a cint if ye 'll use them.' 'I will,' says Daly ; and by and by they come, and that's wan," said O'Grady.

"I said to Johnny, meself, 'Johnny, ye 've taken no degree.' 'Have n't I?' says he. 'Who holds the record for the biggest catch of yellow-tails in a day?' 'Well,' says I, 'ye do, of course.' 'Then what more do ye want?' says he, holding out the card, 'Johnny Daly, B.A., Boss Angler.'"

* As these lines are written I hear with regret of the death of Johnny Daly, sharker and gaffer. Any man who can bring iughter and mirth into the world has made it better. Vale

The bay from whose shores we had this white sea-bass fishing is the site of one of the most interesting kitchen-middens I have seen. I saw it first far offshore, a black spot, that had been lived on and burned over for ages, by the primitive man of California. It was the principal burying-ground of Santa Catalina, situated eight or ten feet above the water, directly on the bay. Mexican Joe said that thousands of people had been buried there, and lured by the thought of ancient loot, we decided to spend the day in the old mound as a rest from the strenuous sport of angling.

The earth was black in places; again a brown, and filled with gleaming bits of abalone; hard by was a mound of these shells. I set the men at work making a trench, and at about ten feet we came to hard pan and found that the bodies had been buried, one on top of the other, in four or five layers. The possessions of the deceased were buried with him, and we found bowls of steatite, grinding stones, spearheads, and arrow-points of flint, beads, fish-hooks of shell, earrings, and various objects in bone, stone, and shell of unknown use. One skull was partly filled with beads which had been placed on the head over the eyes and had so found their way into the interior. Most of them were crude, made from parts of shell; but Johnny Daly. Many a sea angler along the Isle of Summer will keep his memory green.

here and there were Venetian beads, showing that the natives had some connection with navigators. I could tell almost exactly when the Spanish appeared. Thus in the two layers of bodies on the hard pan, or the deepest, no metal or foreign beads were found, the implements being of stone, bone, shell, or flint. In the others, metal, iron, or copper was present, showing the communication with the Spaniards. In nearly every grave was a bell-clapper or two, used as pendants.

I was particularly interested in the articles used by the ancient fishermen. The hooks were beautifully made of haliotis shell, mother-of-pearl, and almost invariably had the barb on the outside. Sinkers were made of steatite, and lines of a long slender seaweed. I found one of the latter coiled, ready for use. Pipes of steatite, flutes of bone, needles, pots for paint, dishes of stone, haliotis shells, with the openings stopped with asphaltum, and many other articles fell out as we worked into the mound; and some idea of its wealth in an archæological sense may be conceived when it is known that many tons of implements have been taken from this spot by the government and by various collectors, and sent to museums all over the world. Here the ancients had lived for unknown centuries and buried their dead, and as a result of several hours' work I had ten feet of beads alone. There were a number of iron implements in the upper graves, as files, an adze, knives which were

carefully wrapped in cloth, the latter being literally iron cloth.

It is my fancy to think that ages ago there were two islands, and what is known as the isthmus has been filled in during the past one thousand years or so. Some of the old Spanish historians refer to two islands. Last night C—— joined us in camp, bringing mail and a most interesting paper, the "Voyage of Cabrillo," the original discoverer of this fishing-ground. The paper has for years been hidden away among the archives of the library at Madrid. C—— read it aloud as we sat about and traced the two ships along the coast; then being a *raconteur* and "spell-binder," he entertained the men about the fire over the pipes with alleged new stories. This was the only really savage trait in C——'s nature; he kept these faithful men, a little out of touch with the world, laughing far into the night with the stories I had heard years before.

The next day Mexican Joe said to me, as he whirled the line-drier that was fast to a tree, "Mr. C——'s mighty nice gentleman, but some one's loaded him up with a lot of old stories, all right; I heard all them before the Civil War," and Joe broke into an infectious chuckle.

There is a high appreciation of humor along the Kuroshiwō. I saw a tenderfoot land a twenty-five-pound yellowtail from the beach a few days ago. He was so delighted that he told a man just

how to do it, with an abundance of detail, a listener who had taken a hundred yellowtails; and as the latter passed on, another old-timer took his place, and another, until that tenderfoot had explained that catch so many times that he was haggard and husky when I reached him, late in the afternoon. When I asked him how a man could take so large a fish on so small a line he braced for the effort and began. Perhaps he is still standing reviewing the line of boatmen and old-timers, still disseminating knowledge.

CHAPTER XVII

THE FLOATING GARDENS OF THE KURO-SHIWO

The Beauties of Kelp Beds. Curious Kelpfishes. Sheepshead, Albacore. Denizens of the Kelp. The Black Sea-Bass. Glass-bottom Boats.

THE island of Santa Catalina is a picture with a turquoise background, the Kuroshiro of Japan, which flows down our coast and has a frame of emerald green, the kelp beds; and with rare exceptions the entire Pacific coast is protected in this way, the giant weed rising in water thirty or more feet in height, reaching the surface, and forming in many instances a barrier against the heavy sea which comes rolling in across the broad expanse of ocean. Especially at Santa Catalina it forms, in the smooth water of the north and east coasts, a series of beautiful floating gardens, twenty or more miles in extent; a forest of the sea of varied attractions, in which are found strange and often beautiful fishes, and other marine animals, specially adapted or modified by nature to their peculiar environment.

Midday, at half-tide, is the best time to visit these floating gardens; then the bottom can be plainly

seen, a vivid turquoise blue gleaming brightly through the interstices of golden branches, really green, which when illumined by the sun take on an old gold hue. The leaves are ten, twenty, or even thirty feet in length, twelve inches in width, richly fluted, and hang in myriad positions of grace and beauty, so that in peering down from above one looks through halls and *parterres* innumerable, that extend and reach away to infinity.

In South America, especially about the Falkland Islands, the kelp, or *Macrocystis*, attains an enormous length. Sections estimated at one thousand feet have been taken up and employed as cables for ships, which were thus saved the trouble of lowering and hoisting their anchors. On this desolate coast the kelp forms a protecting fringe for fishes which otherwise would be unable to live, owing to the heavy surf that is always piling in; and thus incidentally the miserable Patagonians are saved from starvation, subsisting almost entirely upon the fishes, the barren half-frozen land producing little or nothing.

Everywhere alongshore this maze of hardy vines constitutes a shelter for many animals. It is a forest of seaweed, rising from great depths, rolling over and over in strange but graceful convolutions in the surf or tidal currents, a menace to swimmers and at times to vessels, but when dormant and illumined by the sun, a thing of radiant beauty.

Along the Santa Catalina coast, at extreme low tide, the kelp lies in such thick involved masses that it forms an almost impassable barrier. These huge vines, which do not indicate a rocky coast, fasten to small rocks or stones anywhere in water of medium depth from a few yards to half a mile from shore; and when cast up, show the short roots coiled about some small object with a vice-like grip. These floating gardens afford a home to a multitude of animals, strange, because they have insensibly taken on a singular means of protection, mimicking the tone or color of the leaf. These animals include crabs, shell-less mollusks, and fishes. One of the crabs, which is nearly two inches across, is so perfect an imitation of the kelp that when lying directly before my eyes it was almost impossible to see it unless it moved. It has peculiar points and spikes which further intensify the resemblance. Lying on the great leaves are numbers of slug-like creatures, "shells," without shells, tinted green, safe in this protection from nearly all intruders. But the most remarkable resemblance is seen in a fish called the kelpfish. It is about a foot in length, the exact color of the kelp, with a long continuous dorsal fin, frilled exactly like the edge of the leaf. Did this fish dart about, or comport itself as other fishes, it would at once be observed, but it does nothing of the kind; it lies at the bottom, or near it, standing literally upon its head, with

its tail extending upward with the shorter kelp leaves, and in this position, hanging in the gardens, waves to and fro with every swell that sways the forest of algæ.

I have looked for these fishes, watching every leaf, and finally discovered the elusive creature under my eye not three feet away. Many of these fishes have been examined through a water box or glass-bottom boat, and in almost every instance they were poised or holding themselves in some peculiar position which made it almost impossible to distinguish them from the green masses of weed in the mysterious currents.

In calm weather the kelp leaves lie dormant, like sea serpents, upon the surface, folding and unfolding listlessly, but when the wind rises and the sea comes in, it appears to be filled with waving monsters that, gripped in fierce embrace, are rolling over and over. Often in severe gales the entire kelpian forest growth of a locality will be wrenched out, and cast ashore to form a pile or heap upon the beach; but soon to reappear again. All the islands have this fringe or beard, and at the entrance of San Pedro and Santa Barbara it grows in great masses, forming true forests of the sea.

So attractive are these groves of the ocean, "these gulfs enchanted," that a great industry has grown up about them, that of the glass-bottom boat, a boat with a window where the keel ought to be, boats so flat that they can skim over the

kelp beds. Avalon has a fleet of these curious boats,—some propelled by hand, some by oars, others by side paddles; and the captain of the glass-bottom boat is very much in evidence at Avalon, where boats are cabs and the highway is the sea. They are sailed over the kelp beds, and the passengers sit and look down into the ocean forest and observe its strange denizens slightly magnified by the glass window inserted at the bottom of a well.

The kelp beds are the home of a number of large game fishes, the sheepshead and the black sea-bass, the latter one of the largest of the bony fishes, attaining a weight of seven hundred or eight hundred pounds. The bass is migratory, coming in or up from the Cortez Banks in May and June to spawn in and about the kelp beds; but singularly enough, a very young black sea-bass has never been found here; the smallest observed by me weighed about sixty pounds. Where they go, how they comport themselves until they become giants, is one of the mysteries of the sea, at least in this region. From July until November these fishes bite well and average about three hundred pounds, all being taken with the tuna rod, reel, and small line.

I often saw a gigantic fish follow up a whitefish or sheepshead as I reeled it in, the fish, despite its size, being very gamy and possessing all the attributes of a black bass except its leaps. We tried

fishing for it near our cañon, but having poor luck, went around to the kelp beds opposite Avalon. The boat was anchored to the kelp, not one hundred feet from shore, and the bait, four or five whitefish, tossed into one of the open places in the kelp where we could see loops, galleries, *parterres*, and courts in which the golden angel fish and others poised. We waited possibly an hour, when the line began to glide slowly over the side and the reel to clink slowly and ominously, ze-ze-ze. I gave it twenty feet, and when the line came taut, hooked it. I was not prepared for the jerk, the retort discourteous, that came. The rod was nearly jerked from my hands, and the line torn from the reel to the wild and brassy cry of the click. The boatman cast off the line which he had buoyed at the strike, and in about ten minutes I stopped the fish, which towed the launch into the open, while I pumped and reeled, feeling all the time the ponderous weight. An eighth of a mile out there was another bed rising in sixty feet of water, and the fish hooked here invariably swam for this and plunged in among the weeds, hoping to break the line. The problem was to bring the fish in before it reached this refuge, or divert it; but I found that my efforts were of no avail; the bass moved stolidly on, in the direction of the submarine grove, its summer home, and I was powerless to prevent it. I worked at the reel twenty minutes, then handed the rod to a laughing and critical comrade

and waited for my revenge. He had not expected to be taken up, but heroically took the rod, and to my satisfaction could not stop the fish, which ran into the kelp and escaped by breaking the line. Of course this fish was a monster, doubtless a record fish.

We imagined it as ten or fifteen feet in length and the Daniel Lambert of fishes. How true it is that the largest fish always escapes!

Returning to the inshore fishing-ground, I broke my rod on something, and my companion later landed a fish that was found to weigh three hundred pounds. The monster's play was exciting and vigorous, though ponderous, and as it came in, it tossed the water over us and formed an impressive picture. Having no tip, I took several of these giants with a hand line and found it a lively pastime, though not so exciting, not so thrilling, as the capture of the tuna.

I was induced one day to row to the grounds with a companion who had never seen a bass caught, and as he wished to row for exercise, we took a one hundred and twenty-five pound skiff. Arriving on the ground, I began fishing for bait; by chance we found a school of sheepsheads, and could have filled the boat with these fine fishes. One I caught weighed nearly twenty-five pounds and sadly demoralized my light rod. Our skiff was fairly loaded with this game when we began fishing for bass, and when the strike came, it was a jerk that

threatened to haul the boat under water. For half an hour I played the lusty fish and got it alongside with great difficulty, as it repeatedly jerked the gaff from my hands.

My companion then began to row, and in the meantime a sea had picked up. I made the head of the bass fast and also took a pair of oars, and we pulled the fish around Church Rock in a heavy and menacing sea, the fish struggling continually. We finally reached smooth water, and I hired two fishermen to convoy us in. We hauled the big bass aboard, and I sat upon the giant, while my companion rowed and the two boats placed themselves on either side. The rail of our skiff was just at the surface, and a slight wave would have swamped us; but our pathway was absolutely smooth, and we reached Avalon in safety and found the bass weighed 347 pounds. I took a number of these fishes, ranging from 157 to 360 pounds, at various times, and the record *rod* catch chronicled by the Tuna Club is 429 pounds, the catch being made in 1905.

During this season several lady anglers successfully landed this ponderous fish, one of which weighed over 400 pounds; and in fact, the wives of some anglers emulate their husbands and take all the great game fishes with rod and reel:

This massive bass is confused with the Florida jewfish, being known as the June or jewfish; but it is something entirely different. It never lies upon

the bottom, scorns holes and mud, and has the true bass habit, and is seen poising in the verdant halls of the floating gardens of its choice. I have seen this fish play about the line in the kelp bed in water forty feet deep as I lay on the little deck peering down through the crevices of the floating garden, and that it was coy, clever, and cunning was more than evident. It swam about my shining lure fifteen minutes, examining it with the closeness of a gray snapper, then took it, and the very fabric of the forest seemed to fall as it shot away. The black sea-bass is not a game for daily capture; it is too ponderous; it is bear-hunting. One or two is sufficient, though some anglers are so enamoured with the great fish that they follow it all through the season and never weary of the Titanic struggle that is always a concomitant of the sport.

Coming in from these gardens of the sea one day we saw in the distance a mass of foam on the surface, and running out entered a school of albacores, which were chasing flying-fishes, and hooked one. Here is a pelagic fish which affords fine sport. Its sudden rushes, its quickness, make it a delight-giver on the rod. My fish rushed seaward like a rocket, now along the surface of the water, then when checked, sounded, rising to dash in a great circle about us, and when on the surface in the deep blue hollow of a wave presenting a splendid spectacle of vigor and staying qualities, coming in slowly, fighting every inch until gaffed.

The albacore, so far as appearances go, is a tuna, with long pectoral fins, the latter sabre-like and nearly as long as the fish. Its eyes are large, its back green, belly silver, its tail powerful. Few fishes have its activity and driving power. The albacore comes in great schools, but breaks up when it reaches the islands, and can be found a mile or two off Avalon Bay much of the year. I have seen fishes that weighed sixty-three pounds, such a fish towing a boat several miles. Vincente assured me that he had seen one-hundred-pounders in the San Clemente Channel. I often watched the albacore, but never could see that the long side-fin was used, though doubtless it is a factor in the rushes of the fish into the schools of small fry upon which it preys. Albacore is fair eating, and anywhere except in America would be considered of value; but this is a land of wealth and abundance, and there are scores of splendid fishes which are cast aside for lack of demand.

I spend much time drifting over the kelp beds, and a more interesting aquarium it would be difficult to imagine. In shallow waters I see the crevices filled with huge anemones and long-spined echini. Huge starfishes crawl here and there. The great umber-hued sea slugs lie on the rocks, feeding on the weed, while now and then the golden angel fishes fairly dazzle the eye. The young are splashed with vivid blue spots. The older ones are dark red with blue spots, while the adult is a

blazing golden red. Here is the sea hare (*Aplysia*), a giant weighing six or eight pounds, grazing on the vivid green *zostera*, the dainty of its choice. Touch it and it ejects a cloud of purple ink, a singular and effective defense, as the ink is extremely disagreeable, having a musky odor.

I watched a diver a few days ago walking through the kelp. He pushed the great leaves aside as he walked, as though strolling through the bushes on land ; and finally sat down and broke open an *echinus*, holding it in his hand. The fishes doubtless thought that he was a great crab as they darted at the bait, paying no attention to him. I lowered a fish-trap, watched him open the lid and bait it, and saw the small angel fishes go in. When a dozen or more had entered, he closed the lid, and we hauled up the trap. I followed this diver through the window of a glass-bottom boat as he left the forest and walked out over a sandy desert track ; then reaching a pile buoy, he climbed it and tore off the incrustating mass of *Serpulae*, the largest and most beautiful specimens I had ever seen. They are worms, and their breathing organs resemble the petals of flowers, and are of all colors of the spectrum,—disappearing at the slightest alarm, to bloom again. These indeed are the flowers of the sea.

There is the greatest variety of seaweed here, of all hues ; and occasionally I find small corals covering the rock in places, and yellow and vivid

red sponges. In the calm and shallow corners of the coves I find plantations of *zostera*, or sea-lettuce, of rich green tints, one of the most attractive forms in this garden of the sea.

At the entrance of the Blue Cavern, a cave into which a boat can enter and come out at another opening, the water is particularly beautiful in color. As I floated off this cave one day, I glanced upward, and nearly one thousand feet above saw the six-horse stage just coming over the divide, bound from Avalon to Cabrillo, over a marvelous road, from one end of the island to the other, taking the traveler or angler over some of the most picturesque regions of the island. In crossing by this road one becomes familiar with the bird and animal life of the interior. I have seen several foxes, humming-birds of two or three kinds, and many of the birds of the mainland which find shelter here at some time of the year, or remain the year around. One day, in coming down the coast from Long Point, the launch was run up to the Torqua Spring. The boatman ran up to a small float, perhaps one hundred and fifty feet from the cliff or shore, reached down and lifted the end of a hose, which he unscrewed and presented to me. In this convenient way the boats can obtain their drinking-water out on the ocean, away from the shore.

While casting from the beach to-day at Cabrillo for white sea-bass, I made the acquaintance of an ancient mariner engaged in an interesting business,

the polishing of abalone shells for the trade. He sat astride a queer machine, with a small windmill attached, which provided the motive power for the grindstone which ground the shells into shape and made them ready for the polishing process. Comparatively few Americans are in the abalone-collecting business, the majority of fishermen being Chinese or Japanese; the latter following the work on the mainland shores, the former on the islands. I visited a camp of Chinese abalone-hunters on San Clemente, on my second trip to this place. There were ten or fifteen in the party, who had been left there by a junk some time previous, with provisions sufficient to last them some weeks. The camp, a tent, was pitched in a hollow, and all about were gunny-sacks filled with the shells, while spread over the sands were rows of the animal drying in the sun, destined probably for China.

Every morning the Chinamen of this gang were allotted certain stations on the shores of the island, and proceeded to investigate every rock and boulder within reach, often going out into water waist-deep. In this search it is said Chinamen have occasionally been caught by the shell. The victim in one instance thrust his fingers beneath an abalone, which settled or closed upon them like a vise, causing him to drop the chisel and leaving him, like Prometheus, bound to the rock. It so happened that no other man came his way, and finally the tide

rose over his head. This, it is alleged, occurred off the coast at Monterey.

The Chinamen at San Clemente collect during the day and clean the shells at night, drying the animal, which makes an excellent chowder.

An attempt was made at Santa Catalina to collect abalones by diving. The boat was anchored in water ten or fifteen feet deep, the diver, in armor, descending to the bottom by a ladder. Once on the floor of the bay, by pushing the weeds aside with both hands he reached the rocks upon which the abalones are found. Here he sat down and pried off the shells, which he placed in a wire basket carried for the purpose. This method is employed by the Japanese, who follow the vocation alongshore, especially at Monterey, though armor is not always used. The men are remarkable divers, and, armed with certain tools and huge spectacles, or water-glasses, they dive down to the haunts of the shell and pry it from the rocks.

The amount of shell and meat obtained by these various classes of fishermen is not inconsiderable. In one year the catch of abalone shells and meat in San Diego County was 940,000 pounds, valued at \$20,750; Santa Barbara County, 53,825 pounds, valued at \$2291; San Luis Obispo County, 1240 pounds, valued at \$20; Monterey County, 10,855 pounds, valued at \$515; San Francisco Bay and vicinity, 2,000,000 pounds, valued at

shapes, which were bound upon the forehead, while the pearl was used for inlaying flutes, mortars, or clubs. The meat constituted the chief food of the natives of the islands, and in the kitchen-middens thousands of shells may be seen, heaped up from time to time by the natives. In making large collections of abalones, pearls are carefully watched for. Many are attached to the shell; nearly all are black and when of perfect shape are of value. Few natural objects entered so completely into the life of a people as did these attractive shells into that of the California aborigines. So thoroughly were they collected in early times that the large, fine, red shells are rarely found at San Nicolas to-day, yet the beach at various points is heaped high with ancient shells of the largest size.

out to sea ; yet the island has an interesting avifauna. The gulls follow one everywhere. They often make the sixty-mile trip with the steamer, and take turns in resting on the gold ball at the masthead, and are fed by the passengers. On the beach they are fed about the fishermen's stands, and are as tame as chickens. One fisherman, Vincente, tells me that he can touch certain ones.

When the men clean the fish hundreds crowd the beach, reinforced by brown pelicans, sea lions, cormorants, and others. There were three kinds of gulls in some of the groups, and their graceful movements are a constant delight ; indeed one of the charms of the vale of Avalon is the frequent display of bird life that is met with on the little bay. Every fishing trip affords opportunities for the study of water birds. Out a little distance I found the tufted puffin that breeds at Santa Barbara Rock, twenty-five miles to the northwest, with Cassin's auklet. Here are murrelets and guillemots, and beautiful terns, shearwaters ; and once I caught sight of a man-of-war-bird and again of an albatross.

Many of these birds take an active interest in all fishing operations on their preserves, especially the two or three varieties of cormorants. One day the cormorants took my bait as fast as my boatman could rebait the hooks, and their swimming under water was marvelous. These birds are very tame, and flocks of several hundred are now in the bay as tame as ducks, dividing as the

in the sun. Its lethargy can be imagined when I say that it permitted us to run alongside when it was gaffed; then it came to life and made a sturdy resistance, almost hauling the gaffer overboard.

These curious fishes attain extraordinary size, and several extremely large ones have been taken. I gaffed a large one off Boon Island in the Atlantic once which gave us much trouble before I landed it; but this was an infant to one that was caught at Santa Catalina, the latter being eleven feet from tip to tip. I aided in the capture of one of these monsters at the mouth of the St. John's River, Florida. I saw it first struggling on the bar, where it ran aground like a ship, and we went out and after a hard struggle caught it. I heard later that it weighed two thousand pounds, about the evident weight of some of the Californian fishes which have been seen, harpooned, but not caught.

The sunfish appears to have no tail, a mere rim constituting this appendage, a tall fin rising as a dorsal and another opposite serving as balances to the huge head, as body there appears to be none. I have often seen small individuals swimming about beneath my boat while fishing in these clear waters.

I am always astonished at the variety of fishes here; it is endless. Yesterday I secured an entire school of squids, none of which were less than eight feet long. I was sculling my boat around the edges of a little bay when the remarkable

them dash entirely out of the water after them, running in a strange gallop several feet from the water's edge. Having handled many in Florida, I do not object to them, but they inspire horror in the average man or woman who has never seen them. I tested this in the Zoölogical Station, where several large and particularly savage specimens were kept. Out of a number of men none could be found who would attempt to lift a large black and white octopus from the tank. I finally came to the rescue to demonstrate how harmless they were. The moment I inserted my hand the octopus darted at it, as a cat would at a mouse, threw its arms over it with a smothering motion. It was horrible to contemplate, especially as the green eyes of the monster blazed, and it constantly changed color; but it made no attempt to use its parrot-like beaks to bite me, and the only disagreeable feeling was caused by the scores of suckers which held me by a firm grip. The largest octopi found on the coast have been twenty-two feet across. Such an animal could easily drown a man, or several men, in the open water; but they are timid animals and would not attack a man unless cornered.

The rocks alongshore here are covered in places with the great ear-shell, *Haliotis*, or abalone, several species of which are found. It is really the most beautiful of all shells, possessing every color and tint and all the beauties of the spectrum.

the spot and with a heavier rod tried to hook the fish. But it bit the wire in two as fast as I replaced the hooks, evidently not minding the diet. Near me was a boat having a string of fish hanging over, and this now attracted the shark, its movements so alarming the two men that they dropped down out of sight, then tried to shoot it with a rifle. All this time the shark was darting about the boat, its enormous dorsal fin projecting above the surface. The men evidently thought that it would overturn their boat, so they cut away their anchor and began to row inshore. The shark then headed to the south, and I followed it into the bay of Avalon, where it attacked a string of fish some men were towing in, and took them, making so bold and savage a demonstration that the men retreated.

I determined to try conclusions with the shark, so rowed in, got a shark hook and line, and asked a friend to row me. When I again reached the boat the bay was in a state of great excitement, and I saw the fin of the shark in the centre of a fleet of boats, the occupants of which were striking at it with oars and poles, while some were shooting at it; but the shark paid no attention to them. It was doubtless driven to desperation by hunger. The number of boats increased, and finally the shark passed around to the south side of the bay. Seeing what its course would be, we rowed out and placed ourselves directly in its

shark caught in a hand-to-hand encounter, where the element of fair play was conspicuous, and he was utterly demoralized at the movements of the fish, as it repeatedly plunged down; and only the presence of the fleet of oncoming boats prevented me from cutting away, at his request, as time and again the boat had a narrow escape. I told my oarsman to row against it, then finally I got the line in hand and passed the slack between my legs for him to coil it as I gained, standing ready for a rush that might come at any time.

I had caught nearly every catchable shark that swims, but this was my first hammerhead, and I was anxious to secure it, so I played it as carefully as possible; but repeatedly it broke away, and not until it had towed us three miles did I bring it near the boat, and then I thought it would overturn us, so savage were its lunges, so ugly and menacing its appearance. But by mere good luck I hauled it to within a few feet, secured the chain, and held it. But my amateur boatman could not stop it; we still moved out to sea. The fleet was approaching, and presently a boat reached us, then another, but the outward movement of this shark was not stopped until six skiffs and twelve oarsmen made fast; then the tide turned and the procession headed in, the direction being reversed. I then hauled the shark's head up to within a foot of my hand and held it, helpless, though it repeatedly surged down, bend-

But the sea lion is very intelligent. When he finds he is caught he dashes into the kelp or beneath a pier and so cuts the line, or if on the outside he literally bites the wire. The yellowtail when hooked often displays similar cleverness. I hooked one from the beach which at first made a rush directly away, taking two hundred feet of line; but when I stopped it, it turned, came rushing in, and deliberately ran in and out among some moorings, breaking the line.

In the time of Scammon the isthmus of this island, on Cabrillo Bay, was occupied by a herd of sea elephants, but he killed the last in about 1850. The sea lions are protected, and there are several rookeries, the largest at the Sea Lion Rocks on the south end, where the sea lions are so tame that they can be approached within a few feet.

On a recent visit they were breeding and out on the beach. Every afternoon they leave the rookery and make a tour of Avalon Bay, and their roars and barking can often be heard all night. The rejectamenta of the fish-stands is thrown to them, and the spectacle of a huge sea lion coming out of water and up the beach to catch the fish tossed to it by anglers is one of the diversions at Avalon.

The value of these animals as scavengers is well illustrated, as a dead or floating fish is never seen; the gulls, sea lions, and, lastly, the bald eagles keep

be felt at the surface. The flying-fish, a foot in length, provided with two large side fins and two smaller ones, is seemingly a clumsy creature when seen lying upon the beach or even when swimming, the long fins being apparently of little or no use in the water, but once in the air they have a marvelous buoyant power, supporting the flier for almost incredible distances across the mirror-like sea. This habit has made possible one of the most singular of all sports, the shooting of flying-fish. I use the launch, sitting in the bow, the boatman sending her along at full speed. The splashing of water at her bow alarms the flying-fish, and sends them into the air, sometimes in droves. They often rise directly at the bow, so near that it is necessary for me to hold my fire until they are one hundred feet or more away, when they are shot as are quails or grouse. The sight as the fish dart upward is very attractive, as they rise in the most unexpected places, just as do the California quail, and move so rapidly that it is by no means easy shooting. Again, the fish so resemble the water that it is difficult to see them unless they are lifted into the air by the wind, in which case the "covey," or school, resembles a flock of gigantic dragon-flies. Sometimes the boat is surrounded by fishes, and I have had a flier pass within a few inches of my face, having to turn to avoid being struck. In one instance they came over the boat in such numbers that we were obliged

and scintillating on their wings. So crazed and demoralized were these fishes, the fliers by fear, others by the lust for conquest, that they paid no attention to the boat,— the flying-fishes hovering under it in frightened groups, the tunas dashing through them, flinging themselves into the air alongside, so near, indeed, that one almost expected to see a tuna drop into the frail craft, and possibly go through the bottom, which would have been the result.

No question has attracted more attention or caused more discussion than that relating to the flight of the flying-fishes, and never was a better opportunity afforded for observation than at Santa Catalina and the smooth bays near our camp and on its north coast or the channel of the same name between it and the mainland. A large number of observers hold to the belief that the fishes fly after the fashion of birds, flapping the wings or fins. A fisherman told me that he had seen a flying-fish escape from his hands by a vigorous flapping of the wings and sail away; others again, and the majority of observers, think that the so-called wings are not wings in the sense of flying, being merely parachutes. I have observed the flight many times from all points, and from a distance of a foot to fifty feet, and have never yet seen the fins of a flying-fish move up and down voluntarily. That they appear to vibrate and beat the air is true, but it is not for the purpose claimed. The

to fail, the tail of the fish will drop lower and soon touch the water. Now if the flier believes that it has outrun the threatened danger, it drops with a splash, tail first, and swims off; but if it suspects that some enemy is following, it lashes the water with its tail, which again forces it into the air. In this way a flying-fish, by repeating the action, can propel itself through the air for an eighth of a mile, and probably a much longer distance. Even then the tuna, albacore, or bass follows it, and is ready to seize it at the end of the so-called flight, which is *soaring*, pure and simple, with any apologies to the disputants for the pronounced assertion.

The flying-fishes are very active at night, and often "fly" ashore or into our boats, and from an elevation they can be seen in Avalon Bay on midsummer nights, marking the dark water in lines of vivid phosphorescence. The victims of all predatory fishes, they lead a life of continual retreat, now soaring over the sea from one enemy to drop into the maw of another, well illustrating a phase in the struggle for existence eternally going on among the denizens of the deep.

fitfully back and forth, and seas from three sides came rolling in. Mexican Joe had charge of the surf-riding, but I tossed my shoes off and got ready to swim, as I did not think it possible to reach the beach. The men, however, kept the boat out of the surf until the right moment, then gave way, and we shot in on a great roller, and reaching the beach, sprang into the water to hold the boat, which was rushed up the sands. It was a dangerous place; a terrific undertow tossed and coiled the kelp like so many snakes, and to have become involved in this maze of fronds could have but one ending.

The lone inhabitant of this desolate spot met us, a Basque who spoke English in a way; but he was very uncommunicative. He had not seen a man for six months, and did not take any interest in the world. He wore a large sombrero-like hat tied under his chin, carried an old-fashioned army rifle, and was accompanied by a dog. I fancied the dog was the more human of the two, and when the Robinson Crusoe took his companion by the tail and threw him overboard I was sure that my judgment was correct. I asked the man if he had collected any stone implements. He replied, "No," that it was unlucky to disturb the dead; it made the wind blow, and as it was, the evil spirits almost blew him into the sea. As one of our men said, the spirits had "sized him up." He lived in a low shanty, its roof covered

here and there like glaciers, and San Nicolas appeared to be the wreck of an island.

Two centuries ago it was well populated; but it is said that the Mission fathers induced the people to go to the mainland to live and be converted, and there are several historic accounts of the removal, all agreeing that a woman finding that her child had been left, leaped from the vessel into the sea and swam back. A heavy wind prevented them from waiting, and the woman was left and in time forgotten. In 1850 or thereabouts the legend came to the knowledge of a priest at the Santa Barbara Mission. He hired a vessel, the *Maria Better than Nothing*, and sent a party in search of the lost woman. The men at first could not find her, but saw evidences of occupation. As a last resort they formed a line across the island and slowly worked their way north, covering every yard, and finally came upon her camp, a hut made of the ribs of whales covered with the skins of birds and seals. The woman, who was fair and comely, fell down before them. She was dressed in bird skins, and was preparing a seal when found. The men took her with all her belongings and carried her to Santa Barbara; but no one could be found among all the Southern California Indians who could understand her. She told them by signs that her child had been killed by the wild dogs and that she had lived alone on the island. A civilized life did not

water by lapping the wool of a companion, the dense fog being so thick and heavy that the sheep were like sponges in the morning.

On the southwest point was a splendid marine arch, and near by a vast brown pelican rookery, the gentle slope of the mesa down to the sea being covered with these birds, which rose and fairly made a black cloud as they wheeled about. The fishing was excellent here in the kelp, and vast schools of bonito and several swordfishes were seen. It was but an hour's run to Santa Cruz, a well-wooded and attractive island about the size of Santa Catalina. We cruised about here a week. In the centre of the island, surrounded by mountains, and reached by a cañon stream filled with fine oaks and other trees, we came upon a vineyard carried on by a Swiss-Italian colony. Here was a typical French home, a big French horn swinging under the veranda, a little village of houses, a chapel, winery, and quarters for the men, while the vineyard bore the delicious grapes of France. A more romantic and delightful spot it would be difficult to find,—a French home, hidden away among the island mountains of California, environed by large trees, and at one time, years ago, the home of a race of islanders who have left evidences of their occupation everywhere along-shore. I mapped the old town sites and camps, and found the telltale black earth and shell all along the shore, and at the entrance of the cañon,

THE ISLE OF WINI

where there was a little laguna, I d Indian graveyard. The sea had cut i bare the strata so that the layer of sk be seen. Over one was a flat, polish tally marks upon it.

At the head of the island was a sa had been lived upon years ago. We night in a little harbor just large enc the yacht, near a remarkable cave tha mountain from the sea, just north of well named. We rowed into a high chamber, its roof covered with splas then came to an opening about the boat, where for a few moments we chance to enter. Every sea that car from without closed it, and when t away we could hear the wave running ber to chamber, creating diabolical rumblings, as though the entire n groaning and protesting. It was a and as we pushed through, these ai roar of sounds came rushing out. V just in time, as the next wave closed and left us in complete darkness.

Dante never imagined anything and terrible than this cave, where n to have conspired to produce pande fusion worse confounded. The sea cave to cave, from room to room, far away, producing a series of sound

that the crew of the yacht later refused to go in. The room in which we found ourselves was possibly one hundred feet across and of unknown height. We lighted a flambeau, but could not see, so felt around the edges in the darkness, where there appeared to be a ledge upon which the sea lions rested. The entrance through which we came looked like a star, disappearing and reappearing; and that many tunnels and rooms led away under the mountain was evident. I have stood by the big guns in the turret of a monitor, have worn out heavy gales and squalls, have heard the rush of waterspouts not many feet distant, but I never realized what pure, unadulterated sound was until I sailed into this series of caves, this sea lions' den beneath Mt. Diablo. As terrifying as it is, it is perfectly safe if entered with some one who knows the ground. It is merely necessary to wait until the sea goes in, then follow it immediately.

In going out we repeated this, pushing the boat through immediately after the incoming sea. To be caught in the entrance would mean a wrecked boat and possible disaster. I was told by our guide that several boats had been sunk by sea lions rushing over them in the gateway.

This fine island abounds in marine caves, and from their frequency alongshore one might believe that the entire base of the island is honeycombed by them. In sailing along there is a con-

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stant spouting and series of explosions is forced out violently, almost sufficing man from the entrance. At Cueva Val a fine cave is found on the beach, large enough to afford protection to several hundred from one end of the island to the other wrecks of caves, blow-holes, and various rocky phenomena telling of the power

As we lay in Cueva Valdez Harbor I observed a beautiful cloud or fog effect. The leaden masses was beaten against the islands in the west, and reaching the eastern slope eight thousand feet, a fall of sublime and ineffable beauty. As it fell, blown by the wind, the sun caught it, changed it to silver, completing the marvelous mimicry of waters, of falls of stupendous grandeur.

The fishing along this island was very poor. The climatic conditions were strangely different from those of the islands only one hundred miles to the west. It blew heavily every day; the fog was dense and came in in banks seemingly as low as the sea. It was forbidding and unpleasant; and though the island was bathed in this moisture the year round, as shown by the increase of verdure on the rocks. There were several large sea-lion rookeries. I leaped ashore on one from the boat and saw a number of lions come charging down the incline. A large bull apparently making for me with intent to attack.

There was a sea on, and I could not reach the boat immediately, so as I could not retreat I assumed a brave front. When near me the bull lion, which must have weighed half a ton, sheered off and sprang into the water, leading the herd away with loud roars.

In the entrance to some of the caves the cormorants were nesting in their foul collections of seaweed and dead fish; and I saw that a large percentage of the young fall out and drown, the water being strewn with them in some places. This island, as well as the others of the group, is private property, and permission must be obtained to land. From here Santa Rosa and San Miguel can be reached. The former is not so attractive as Santa Cruz, but well worth a visit. It is a sheep ranch, and abounds in mountains and cañons, and affords fair wild-hog hunting. Several years ago a band of whales lost their bearings here, and ran upon the beach of Santa Rosa. All these islands were densely populated a few hundred years ago, the vast deposits of shell telling the story.

San Miguel is the most northerly, and it is believed that Cabrillo was buried here. Portions of the island are being covered by strange rivers or glaciers of sand which flow over the mountains, down into the valleys, sweeping on and on, destroying vegetation, and making a desert of what was formerly a well-wooded area.

This group—Santa Cruz, Anacapa, Santa Rosa,

THE ISLE OF WIN

and San Miguel—lies opposite San Nicolas about twenty miles offshore. Leaving the afternoon, we crowded on sail and the purple tops of the Santa Inez mountains rose in the gray haze to the east. Tunas and but few yellowtails, and winds prevented a search, but the richness of the islands, their caves and straits, were compensations.

CHAPTER XX

AROUND CAPE COD

Old-Time Fishermen. New England Captains. Yarns over the Trawls. A Mutual Appreciation Society. Provincetown Anglers. Horse Mackerel.

“ NUMBER two to port ; throw out one ! ”

I had just landed in one of the towns on the end of Cape Cod, and had entered my name on the register of a trim and ancient inn at the end of a long side alley, when the jolly-looking landlord stepped to the foot of the gangway that led to the hurricane deck, put his hands to his mouth, and sang out in stentorian tones the orders given. Being recently from the city, I naturally concluded that some unfortunate lodger whose accounts were overdue, was to be summarily ejected from number two ; so I waited, being in search of local color and in a good position to witness the fall of man on Cape Cod. But I was disappointed. A trim maid came to the head of the gangway and replied, “ Aye, aye, sir,” and the episode closed. We were to have number two, on the port side of the hall, and the linen was to be changed for our benefit.

I had heard from a friend that the Atlantic tuna,

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the horse mackerel, was often seen in :
Cape in September, and my visit was
the question. I found the old tow:
place, filled with old captains and ang:
ermen, who preferred fishing to wo:
whom time had no definite meaning
mañana land of the East. It was he
met Dave, said to be the town bell-rir
and many more cunner fishermen v
best part of every forenoon on the l
crawled hesitatingly out from the s
great bay of Provincetown, over the
in which the Mayflower anchored ye

To reach this charmed spot I had
ing schooners just in from the Ge
of cod drying in the sun, piles of
one into another like pill-boxes, ke
sword-fishermen with iron pulpits,
sphere of fish and oilskins altogethe

Dave was sitting on a stringpiece
in sight (everything was so nautical
insensibly drop into the vernacular)
a long bamboo pole, with clam b
loads of patience. He looked up v
smile as I propounded the time-h
sesame of the angler, "What luck ?

" Well," was the reply, " it all o
what you call luck."

" That 's so," said a captain fron
pile.

"If heaps of sunshine on a cold mornin' and a clear conscience and content is luck," continued my angler, "why, I've got it, scuppers awash; but if it's fishin', well, it's poor."

"Poor ain't no name for it," added the captain.

"Sit down, wont ye?" said the angler. "What, Californy? Why, I used to go whalin' there; how long ago it was! and I tell you," nodding at the silent town to the leeward, "the old town *was* a town then. You don't say! borned jest across the bay, old Essex County, and never saw the Cape before? Well, well; and I've been all over the world — on the sea. No, you can't get it out of your head, ears, or heart, same with me," and he jerked savagely and for a second stood a cunner on its head, then hoisted in the baitless hook. "Same with me; I was born where I could hear the roar of the surf all the time, and it's music when you do understand it, but hell when you don't. I've heard people say over at Truro on the outer beach, city people, you know, that they got tired of the eternal roar of the sea pilin' in, but I'm never tired of it. Eh? you too? Well, shake hands. Excuse the clam gurry."

"He's got a streak of reg'lar poet natur', has Dave," suggested the captain, jerking his head at the angler and his line at the same time.

"No, I ain't," protested the latter; "it's jest love for the old things, the old times, the old ways. They're goin' down the stream; seems to

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me it's all ebb tide for the last twenty
which the captain nodded and tossed
clam shells as chum.

"Fishin' is queer," continued the an-
his empty hook, being particularly car-
the point from the cunner, that really
subterfuge. "Now look at us two
men."

"But old," interrupted the captain.

"Yes, a little old," assented the an-
of bilgy-like, eh?"

"Holler for yourself, Dave," repli-
tain; "I'm not bilged myself yet, t
hogged, I reckon," and he tried to sto-
his bowed back.

"As I was sayin'," continued the an-
able-bodied men settin' here fishin', fo-
or two flounders, two by four, four or
averagin' three inches, one sculpin';
about the same thing day in an' day out;
pleasant. We swap the news, talk it
a mess—and there you have it. Thin
they was when I was a lad. The old
clipper a town as there was. You see
the finest harbor in the world here.
darn it, it can't be beat, and in the
docks were filled with whalers from all
name meant something then.

"I was a whaler myself; then I tri-
Banks, then went to sea; but someth-

over us. It ain't oil, or cod, or general fishin' that's supportin' the town to-day; now what do you suppose it is? Give it up? Well, it's summer boarders," said the angler in a tone of disgust. "There's Captain B — used to be master of the Ella V.; his wife keeps a house for summer boarders. Here's my old friend Captain S —," indicating the man on the pile with worm bait; "now he's a cunner fisherman, with a pole; he used to be a master hand at swordfish with a lily-iron."

"So I did," echoed the captain.

"Everything has changed," continued the pessimist. "The docks ain't half used, the town's dead in winter, and I kind of reckon we're left behind," and the angler rolled up his line on his long pole and walked away, buried in reflection.

"There's a man for you," began the hogged captain, tossing over his line; "he's what you call an all-round man; he's been everywhere and seen everything, and he's all right except when he gets on the old place. He don't like to see it get dull, and lose its fishin'; but whalin' ain't what it was, and times change. There ain't a better-liked man than Dave. He's town-crier. You'll hear him this afternoon with his bell cryin' out the auction of some sale, and he's been photographed mor'n a thousand times, I reckon. Then to-morrow you'll find him helpin' some cod fisherman along-shore, drivin' the old grays, perhaps, on the sand

AROUND CAPE COD

with a load of cod, or he 'll have a job shop where they 're drying cod.

"Oh, you can find it jest by follerin' — good, too ; or you 'll see him chasin' for some widder whose husband was lost at sea. That 's the kind of a man Dave is. He's been in commission, seams opened a little, but seen service and it grimes him to the bone. Everything ain't hoopin' along under his hand."

"He 's a great fisherman," added the pion, " anglin' he calls it. Now look here. The captain uncovered a basket in which there was a flounder, of indifferent size, one cunner, and a nondescript. "That 's all I 've caught today. I went home with a big string. Fish like to hook themselves on his line, but they know why, unless they know they are after some widder woman. Dave pretends to be like fish, but he likes the ketchin' of fish better than settin' in the sun on the stringpie. You know most folks that fish keeps their business to themselves; they go off to some secret place, and if they are asked where they keeps mighty mum. Is that Davy the captain ?" "I guess not. He lives up in the house that runs across the wind with a long board walk that looks like a groundhog's back. He strikes anything he 'll stop and say, 'Bill,' or whomsoever it may be, 'if you want to try worm bait off Codder's wharf rig.'

bow of the Abbey B ;' or it 'll be, 'Captain Jack, jest try these new hooks a city boarder sent me.' It 's a fact," added the captain, "what 's hisn 's your'n, and that 's the reason Dave 's town-crier to-day, instead of ownin' the hull town. But he 's got something that few has," concluded the captain, and he jerked a cunner ten feet into the air and off, watching it drop into the bay again with conflicting emotions.

"That 's for talkin' while you 're fishin'," remarked a big red-faced man who had lounged up and was leaning against a dory on the wharf, listening with a smile on his face; and when the captain picked up his tackle and rolled up the wharf, he said, turning to me, "There goes the old-time Cape Cod fisherman; we 're only the imitation. He 's full of praise for his old friend, the town-crier, but he 's jest that kind of a chap himself, — aout of commission only for goin' to sea; but when it comes to stayin' at home and helpin' some one else he 's a reg'lar wind-jammer to get there.

"Some time ago," said the newcomer, "one of the crew of that schooner over yonder got to jokin' with him about his clothes,—sayin' that he 'd worn 'em for five years; and the only answer he got was, 'Well, Bill, I reckon I have;' and Bill nearly broke his back the next day apologizin'. Some one told him that the reason the old skipper looked so run daown, was that he was

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jest about supportin' two families of children of old shipmates of his that the Georges."

The red-faced man took out a han baiting it with some worms he carried pocket in a flat blacking-box, he ca field of flounders and fished, and fis talked of his neighbors. All the sti men on the dock taking the sun cure as Captain Bob, and presently he ha laughing. "Curious old chap," con new captain, referring to the last angl mild and pious, naouw don't he? Ne him for a reg'lar out-and-out practical he was wunst. Why, the nerve of that stop the town clock. I ain't sayin' mind, but it's the talk araound town the one who stopped the liner; it wa anyhow. Ever hear it? No? Why, every one had heard that yarn. Jes' t bait, will ye, Sib?" and the captain hook, spit on it solemnly, then lower carefully as though the cunner, the sculpins that were watching him for him" had to be approached with caution.

"It was like this," he began. "One narders was rushin' by the Georges, laious to git into port, when they sighted layin' to with her flag in the fore shrc

down. There was a big sea on, after a patch of a gale, to the eastward, but the Cunarder come to, and the skipper called for volunteers for the life-boat; he would n't order a man out in such a sea. The hull crew jumped forward, and after a bad time they got afloat, with the third officer, and began to pull for the schooner in distress. When they got near, they see she was ridin' like a duck, and as dry as a Prohibition Convention; so they rounded up, and the third officer sings aout, 'Ahoy there! are ye sinkin'?' Into the riggin' swung a long, lank cuss in ileskins, the deacon; putting his hand up he yelled, 'No, but pretty darned near as bad off; we 're aout o' beans; kin ye lend us a pot?' Yaou may think yaou know swearin' when yaou hear it," said the captain, "but they say them men invented some to fit the deacon's case," and the captain gave his line a powerful jerk.

The noon bells sounded and Captain Bob, as the boy Sib called him, rolled up his line and, nodding to the "sunners," walked up the wharf, the boy sliding into his place on the top of the pile, swinging his feet over the bay.

"Captain Bob's that fond of fishin' that I reckon he 'll die fishin'," he said; "he 'll be back after dinner. A better man don't live," he added. "He had a hand in savin' a crew of the English ship Jason, that came in on the Cape in three pieces, and they say he did things that no other

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man dared to do. He'd think not! a rope round his waist and swimmin' wreck in the worst sea. I wish I ha said the boy, abruptly changing "Look at that!" and he pointed ou der directly beneath. "Jes' keep you will ye? I'll get it," and a few mom had a line baited which he tossed at t "Captain Bob's an all around man too again, gazing intently into the water losing his balance. "He has a lot of like him. Sometimes they go wreckin' tain Bob was n't far off when the b came in. He got wrecked himself, always was lucky. She was wrecked, Bob jest walked ashore,— did n't wet, they say, she was so high and dry he served with the Life-Savers awh was n't where he made his name."

"Where?" I asked.

"Spearin' hoss mackerel," was the : a handier man with a lily-iron don't in these or any waters. He's the n jerked overboard, and the men in th see him go, and the fish took him say, fifty feet, but Captain Bob nev it; but it was this way: he speared i before he could let go the pole, it jes over, so quick that they could n't s but he come up in a minute, fifty fee

yelled to them to haul in the fish, and not mind him; but they never got the hoss mackerel,—he towed the boat five miles offshore, and they cut away. I reckon he's goin' yet. Captain Bob? Oh, he just swummed ashore through the surf. He's skipper of a sword-fisherman now. See that schooner layin' over t' other side of the dock? You see that iron pulpit on the end of the jib-boom? Well, he stands there and socks it to 'em. They cruise around till they get ten or a dozen, salt 'em well, and then run for Boston."

Just then the flounder, after several trials, managed to hook itself, and Sib landed it; the fish proving so plump and well conditioned that its captor slid down from the pile, folded up his line, and struck out for town down the wharf, probably calling it half a day.

I hardly remember how I first heard of Ogunquit, but one day I drifted in between the two big rocks that formed the gate of the little town on the Maine coast, and came to anchor at the farmhouse of Daniel Perkins, a fisherman, school trustee, selectman, and all-around good American citizen. Daniel was a cod fisherman and a Democrat, and nearly every day rowed me out in his dory to the fishing-grounds from five to ten miles offshore; and I often went with him, not to fish, but to listen to him and Captain Sam Littlefield, whose voyages down to the river "Plate" were a constant source of interest.

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Captain Sam, in the early days of ship, had confided to me that "when talking, he was sick," and as I never fished with him but when he was physical condition, it may be assumed generally held the floor, while Daniel an-

Cod-fishing in water fathoms deep, most exciting of pastimes, and to see standing upright in the big dory, each line to starboard and port, lifting and eternally lifting and dropping, was to gulf between angling for sport and the market. Captain Sam professed to me; I heard that from others, but he marveled that I could see pleasures of work (fishing) that tried his tri-

I often sat on the Ogunquit rock for pollock with a light rod and reel, times with a fly, and I know that I wondered at it; and here let me enter the pollock on a fly and black bass as the unknown and coming game fishes try, and I confess that it was not until several valuable bamboo tips, and in rod, that I began to appreciate the game of the pollock.

I fished for it from a little rock whose slopes I could glance to the sea of the little bay, and up whose keep sculpins and flounders would climb,

chum I tossed over to see them adapt their color to the bottom. The water was perfectly clear, reflecting the reddish hues of the archæan rocks, and at night a blaze of phosphorescence as the sea broke, running back in rivulets of molten gold.

It was a ground to my fancy, and Captain Sam generally found me there when he came in, and wondered what I could see in pollock fishing,—a fish that you had to run with to the frying-pan, it lost caste and flavor so quickly.

One day Captain Sam and Daniel came in loaded to the guards with dogfish (small sharks), and the next morning I went out with them. A day previous the cod-fishing had been excellent, but suddenly it ceased, and out of the unknown came a horde of dogfish. The water was filled with them, and I fished for them with a rod, while the men caught them with hand-lines, the livers being valued at two cents apiece.

These fishes were so ravenous that they bit at the sail, tearing it in bits, as it dragged over the side; and I doubt if it would have been safe to have fallen overboard, where a score of starving sharks dashed at every splash upon the surface. I saw them bite a jelly-fish, bite at our oars and the keel; they were starving, and all the inshore fishermen of Maine turned to and began fishing for dogfish, the livers being taken and the bodies sold to the "dogfish factories" alongshore.

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Daniel Perkins was a man of few when he had a chance, but a braver of truer worth and courage, I never heard of. Years before he was skipper of a coal schooner bound up the Boston. He, a boy, and a large dog were the crew, as I remember it.

Off Ogunquit, a gale struck her square before the boy could get on deck, and going down, and Daniel was swimming in the water ten miles offshore in his dog-managed to get out of them, and though he had bearings, started to *swim home*.

Captain Sam told me the story. This, it happened, was going to Falmouth in a schooner. He had reached Boothbay Harbor, was bowling along when he heard a shout.

"Hold on, will you? I want to come ashore." The skipper was "struck all of a heap," Captain Sam said, as there was n't a sail in sight for more than five miles; but he jammed the helm over and came up in the wind, and no one saw him. Daniel Perkins.

"How are ye, Daniel?" said the skipper. "which way ye goin'?"

"Why, I *was* going home to Ogunquit, but it's all the same I'll come aboard."

So Daniel swam up to the quartermaster Sim hauled him in. He had swum ten miles, and had been in the water

day, fighting the current that swept up and down the coast ; but Captain Sim said he " did n't seem tuckered, and would have struck the coast somewhere between Portsmouth and York Beach, sure."

This was the kind of man I fished with. Often when we came in before the wind I noticed that he was fast asleep ; but he had the tiller under his arm, and by some sixth sense he sailed the boat. I told him that some time he would come to grief, and when on the Pacific coast, some years later, I received a letter from Ogunquit telling me that Daniel had gone out to the outer bank for the last time. He sailed out into the east — but he never came back.

I can see him now, standing amidships holding the two cod lines on high and propounding some sociological problem, or upholding some precept of Democracy. So a good man went down, and the deep sea he loved became his tomb.

I hunted this fishing-ground well for horse mackerel. I fished on the outer banks, at Boon Island, at the Isles of Shoals, and off the lofty cliffs, but all to no avail. I never saw a live horse mackerel, and had to be satisfied with a yarn of its capture related to me by Captain Sam one morning in the fish-house where half a dozen captains were ganging hooks. I was not even in at the catch by proxy.

" Ole Bill Paisley was a master hand at puttin' the iron into hoss mackerel," said Captain Sam

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as he baited a trawl hook with an esy
and fresh menhaden, "an' he always
of a big feller tacked onto the ridg
fish-house. I recollect it when I was a
out like the star an' crescent, with
only upside down, an' he always hed
was growin' up, when I sort o' fell in
by marryin' his daughter Matildy, a
his ole hog-backed coaster, the Pe
an' you'll see the tail of as big a hoss
the ridgepole to-day as ever swum th
fourteen foot, an' a fourteen hundred

" Only last September we run foul
as big—I swan I hate to say how b
We first heard on 'em at Provincetov
Blaney come in one mornin'; an' w
sog, wan't he? Oh, no!" and Captain
with a sort of internal rumble and ro
his ample face with blood until he ap
on the verge of apoplexy. "He spread
net on the beach, an' there were twent
as round as a dollar. Hoss mackerel,
was that mad that he sings out, 'Sam
ten dollars apiece for enny one of th
cusses ye kin ketch.'

" Well," continued the Captain, " t
thinkin', an' the next day when we
down the Cape after swordfish we str
of hoss mackerel, an' we earned our
captivated six. Jim Dorris was jerke

and nearly stayed there. Sam Blaxey lost a finger, and one dory was capsized. We hed excitement enough, ef that was what we was after. When we sighted 'em it was nigh onto a dead calm, jest a two-knot breeze, now comin', now goin', an' the fish was jest movin' along with topgallant sails set, fins an' tails out, an' crossin' our bow about two hundred yards. It did n't take half a minute to throw the iron and togs into the dory, an' with two men at the oars, another steerin', an' me at the bow, we pulled off an' hauled up to the wind'ard, so to head 'em off like. In a few minutes I saw 'em,—long as the boat an' tame as kittens; a yellow flash on the fins, silver belly, green-blue back, round like a porpoise, and big black eyes. I let two or three go by, jest for luck, sinkin' down as they saw me; then as a big fellow slipped by I let him have it, socked it to him right back of the side fin, an' the boys rushed the dory astern as he went into the air."

Beyond this Sam would not go, but from men here and there, who were with him, I got the story of the great catch practically as I tell it.

"Stand clear!" shouted the grainsman.

Stand clear it was, as the line was leaping from the tub, like a snake in endless coils, ever poisoning in one continuous strike. No swordfish ever whipped line from a boat with greater speed, and the men shrank far astern and watched Captain Sam with wide-open eyes, warning him now and again

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to "stand clear," while he, every nerve strung to the highest tension, stood hand, ready to cut away if necessary and pared to spring upon the rope at the speed. Into the air flew the coils with hiss. The boatman had shipped his oar hole and held the dory head to the ready for the end, which came with a threatening to drag the dory under water.

Captain Sam could have released the end which was fast to the end of the rope, turned it over to weary the game in a long struggle, the fashion of the sword-fisherman, suffered to hold on and fight it out in the water that now, staggering beneath the successive rose, shaking off the water that surged around it, then plunged ahead after the flying fish.

The most exciting stage of the sport had begun, and, crouched in the dory clinging to the keg, holding it in place, "do you see?" the skipper called him in a hushed tone. In the sea wind made by the flying fish, they were on the crest of a wave, now plunged into it, beaten, lashed by the flying scud, the fish as it came, fairly dashing through the green seas which poured in in such violence that men took the buckets and began to wonder if that this harpooner who had grained himself "the River Plate" would weaken and give up.

A wild sea horse, this tunny.]

away, with line so stiff and taut that it hummed like a musical instrument and was twanged by the lapping waves like the string of some gigantic harp. The course had been directly away from the schooner, but now the wild steed was turning rapidly, its direction indicated by the line, and the steersman labored with the oar to haul the dory around. As she came to, the men, leaning to windward to hold her up, were treated to a splendid spectacle. The great fish went into the air in a blaze of silver, shaking itself in its frenzy, falling broadside to leap and leap again.

"Sharks after him!" cried the oarsmen. "Look out; stand by!"

Swish, ze-e-e! and down into the waves plunged the bow, deluging the Bowman, and away went this hound with bones in her teeth on the trail of the tunny, that now dived deep into the ocean in a desperate effort to shake off this thing entering its very heart. Failing, it rose with bounds and leaps, each throb felt by the wave-beaten man in the bow, who stood up facing the flying scud, eager to enjoy every feature, every incident in this wild and exciting sport. Three miles to the west rose the long, low sand dunes of the Cape, and the course was directly for them, the schooner, now under a stiff breeze that had sprung up, rapidly following.

No man in the dory, and they were all followers of the adventurous life of the sea, had ever made

so exciting a chase except with a whale, and they wondered whether the stricken fish was going to run upon the sands. Higher rose the dunes, the little houses of a hamlet—Truro perhaps—standing out in a sunburst. Then the fish turned slightly to the north, and Captain Sam wiped the salt from his eyes, a grim smile lighting his face as he shouted that the game was weakening. It was true: five miles at the top of its speed had taken the freshness out of the fish, and the dory was moving slower and had reached shallow water. No tug could have towed them straighter than did the great mackerel, moving steadily on until within two hundred yards of the low breakers before it realized its peril and turned and came charging at the boat.

“Look out!” shouted Sam. All hands sprang to their feet; the harpooner seized a rope and flung a coil aft, and the crew hauled with all their strength,—hauled and glanced at the shaking sails of the schooner, that now up in the wind waited for them, glad that she was so near.

“Stand by! Steady!”

The grainsman held the rope to the notch in the cutwater, the others braced back, and the shock came, the dory careening viciously, then righting and surging on after the big game.

“Heave o’, awa-o!” and a longshore chanty was started. A fathom was gained, then a dozen. They had the game on the run,—and it was high time, as nearly three hours had slipped away since

the fish was struck. The line was coming in hand over hand, and the grainsmen saw a flash deep down, and announced that they had fought the big mackerel to a standstill. Another chanty, all hands with the exception of the skipper hauling, he coiling ; then, by one of those dying inspirations which even fishes have, the great fish rose to the surface and flung itself into the air, quivering, bending and unbending, and fell clumsily upon the water, nearly foundering the dory by the sea it made. Slowly it swam around, and Captain Sam feasted his eyes upon it. He saw the glint of silver on its belly, the yellow of its finlets, marked the large, crescent-shaped tail, and, with a cheer, held the monster at "short commons" while Tom Coffin hurled his lance into the fish, that dashed around the dory in one splendid final rush, sagged alongside for a moment, then died, a gallant fighter, *el toro* of the sea, as it was. The fish was harnessed, head on, and towed to the beach through the surf, and by the aid of half a score of men from the village over the dunes hauled in triumph high upon the sands. Game indeed ! Fourteen feet long,— more than twice as long as any two men at Truro,— and a day later it tipped the scale at 850 pounds. Yet nothing more than a big mackerel, among the very biggest, perhaps, of the tribe, though in years gone by many have been taken weighing one thousand pounds each.

The huge tuna, or tunny, dominates the sea

among the fishes, fearing only the killers (orcas), and the sharks, which prey upon it. An orca has been seen to rise out of the water holding a struggling tuna in its mouth, fairly shaking it in the faces of the fishermen ; while large sharks will often seize the largest tunas when in the toils of the line or harpoon, the angler getting the head alone. The horse mackerel is an ocean wanderer, being found in all the warmer waters of the globe. It is possibly best known in the Mediterranean Sea, where it is seen in vast schools, fairly tinting the waters at times, and bringing joy to the Italian fishermen. It comes in spring, and when sighted rippling the blue waters of the Mediterranean the word is passed, and the great fish capitalists collect their men and go to sea. The net is an enormous structure of rope, called a madrague, — a clever trap, so heavy that it cannot be hauled, and is set in the path of the fishes, which are in a sense driven into it, while many are attracted by the lures of bait. The madrague is so arranged that the fish are led from one portion to another, and finally enter the inner inclosure, where they are trapped. When this is filled, the boats lie alongside and the net is lifted, and the fish, ranging as a rule from one hundred to two hundred pounds, are taken out with spears and hurled into the boats, which when loaded set their lateen sails and bear away for the ports, where the fish is sold and sent far into the interior.

So highly valued is the fish that no part of it is wasted, even the head being esteemed. The flesh is dark, rich, rather coarse to one familiar with the delicate fresh mackerel of the New England coast, yet with an individuality of its own which commends it, even canned, to fish-lovers in various parts of the world. The chief value of the horse mackerel to the New England fishermen lies in the oil that is tried out.

This account of Captain Sam's experience, gathered in fragments from various captains from time to time, so enthused me that I haunted the coast for seasons, always in search of the great horse mackerel ; but I never saw one, though I whipped the blue waters off Boon Island and all around there with all kinds of bait, from live and shining pollock to fresh mackerel and menhaden ; and it was not until years after, out among the Channel Islands of the Pacific coast, that I saw and landed the great tuna that by many names is known all around the globe.

CHAPTER XXI

SPEARING THE BASKING-SHARK

The Greatest of all Fishes. An Old New England Fishery.

The Whale Sharks of Monterey. Following an Angler.

Wrecking Chinese Crews. The Rhinodon.

I WAS born on the New England coast, so near the sea that the first sound I heard must have been the booming of the surf on the Nahant rocks or on the Red Rock Point that several centuries back was part of a plantation, now in the town of Lynn, that belonged to my ancestors. Among the tales of the sea I picked up from the men about the old fish-houses that then stood on the Swampscott beach, were many about the great basking-shark fisheries that were carried on off the coast in the past century, when the Republic was young; and from one of the men I had the yarn here given.

“Keep her sou’wes’ by south, Dave.”

“Sou’wes’ by south,” repeated the figure at the wheel, a tall, sky-scraping down-easter, with a sharp, penetrating vocal twang like the wail of a jewsharp.

The old schooner, hogged long ago on the Jarvis bar, fell away a point or two; her square uncompromising bow hit the sea solidly and sent

the spume and spray aboard, and occasionally high over an oilskinned figure that hung half-way up the weather fore shrouds, scanning the sea and horizon, now through a glass, or again glancing quickly around and singing out to the man at the wheel to "drop her a pint," or to "fetch her up" a hitch. Finally, after looking intently through the rigging to leeward he leaned over and shouted, "Heave her raound, yaou farmer; jam her over," and amid a violent squeaking, as though the old schooner was protesting in every rib and joint, she fell away until she was almost before the wind, when the oilskinned man sang out, "Steady; keep her so."

"Where away?"

"Lyn' all a-slosh dead ahead.

"Tumble up here, yaou Enos!" This to a boy who was fighting a premonition of seasickness. "Up with ye. Ye see that thing on the water that looks like a leg-o'-mutton sail?"

"Tha — tha — that black thing?" stuttered the boy, breathless from having slipped through the ratlines.

"Yes, that black thing, and yaou keep yaour weather eye glued onto it, or there 'll be a case o' club haulin', an' maroonin' to boot;" and the fiend in oilskins — for so he appeared to the boy on his first voyage — dropped to the deck, and began tossing off his togs, overhauling a big dory that teetered on the uneven deck of the hogged

fore-and-after; throwing coils of rope here and there, endeavoring to bring order out of chaos. A water-keg was flung amidships; two pairs of oars were laid in ready for use. A lily-iron with a long clumsy pole made fast in turn to a rope, coil after coil of which was deposited in an open tub which was placed in the bow, an extra oar for the steerer, and a long ugly whale lance—the “devil’s pitchfork” of the sailors—completed the outfit.

The skipper jerked the dory around head to leeward, ready to run over, then jumped onto the rail to see if the boy had lost the game. “Still there?” he shouted.

“Ye-yes, sir,” was the reply.

“Wal, don’t yaou let him escape, son, if yaou know what’s good for yaou.”

“S’posin’ it dives,” suggested the boy, the stammer literally frightened out of him.

“Yaou must n’t let him dive,” retorted the skipper; “that’s what I feed ye fer, yaou corn-husker; that’s yaour business,” and the skipper cast a ferocious yet withal laughing wink at the landsman out for the sport. “Yaou’ve heard tell o’ sun-worshipers, have n’t ye?” he said to the latter. “Wal, there’s sun-worshipers o’ the sea, sure as tellin’. They jest rise to the surface, gits their backs out as high as they can, an’ lies an’ *siests* the hull day, as the Portugees have it. What for? Why, they like the sun; it hets ‘em up an’ kills off the barnacles an’ things, I reckon.

See him now," pointing ahead; "yaou can see a third of his back; it's a wonder he don't git sun-struck.

"Stan' by!" shouted the skipper. "Luff her, yaou!" And up into the wind came the schooner, and over went the dory with a splash, the men tumbling in.

Ahead, not two hundred feet distant, rose the back and dorsal fin of the basking-shark, that but for the triangular-shaped fin might have been a log awash. But there was no doubt of its true nature,—the giant of the tribe, the huge creature which in the eighteenth century was so common off the New England coast that it constituted a regular fishery, individuals being taken which measured from fifty to seventy feet in length. It has a wide range, and is found in various seas to-day.

This was the monster that now loomed up ahead, true to its name, basking in the summer sun,—sea-birds flying about it, and the waves breaking over its solid back as upon a beach, suggesting that here was material for a modern Olaus Magnus or Bishop Pontoppidan.

The captain was the harpooner, and took his place in the bow; the amateur had a steering-oar, and the two men rowed slowly and carefully on, following the directions of the watchful skipper in the bow. Larger grew the strange object, the biggest of sharks or fishes, in the popular sense,—a colossus taking a sun-bath. The dory came up on

the port quarter of the fish at a respectful distance from the tail, the top of which lay just at the surface, fanning the sea. Slowly the dory moved on, the men lifting their oars carefully, not even feathering, and when near the shark they gave a long surge, and the dory shot quickly alongside.

For a second the skipper could have stepped upon this living island, against which the sea was breaking on the windward side, and doubtless the temptation was strong, as he hesitated and made a move as though he would jump; then lifting the harpoon, with all his force he drove it into the yielding flesh of the somnolent animal. As the thud of the blow sounded "Starn all!" rang out, the four oars struck the water, and the dory shot backward with a force that nearly sent the helmsman on his face.

"Back with her! — back hard!" shouted the harpooner, springing astern, — not a moment too soon, as the huge mass rolled clumsily, then rose several feet, and out of the water came a colossal tail like a catapult, sweeping from side to side, grinding the water into foam, fatal to any object that might have been in its path; then the ocean swallowed it up, leaving a wide, swirling vortex, and the only sounds were the hard breathing of excited men and the swish of the rope as it leaped in regular coils from the tub in which it lay. The dory was headed after the fish, and the men rowed in the direction it had taken, to ease off

the strain when the end came, and the tow really began.

The old schooner had already hauled on the wind, and was fast coming up ; half the rope was gone, and it was still leaping like a snake from the tub. A slight hitch, a foul, and something would have to give. Two thirds gone and still flying, and something smoking. "Down all !" Skipper and oarsmen dropped into the seats, and the rowers held their oars as the last coil leaped over ; the cable came taut, lifting the water in a line of silver for a hundred feet, flinging it into the air, then jerked the dory ahead with a force that would have sent any standing man overboard.

The fish was away, the race was on. Evidently the shark was not fifty feet down, and rising. It had taken a course due north and was holding it, flying along at the top of its speed, impelled by fear, pain, or rage. A sea had picked up and the dory occasionally met one, passing through under pressure, and a cloud of spume which the landsman at the steering oar faced, drenched but filled with the splendid possibilities of this sport and its excitement. The old schooner was doing her best, but was soon left, and in half an hour was nearly hull down ; then for some unknown reason the shark began a long turn, sweeping around in the arc of a circle, literally taking the back track like a fox. The schooner outlook, perceiving the manœuvre, went about and waited for the procession

to pass, then squared around before the wind and followed.

This had occupied an hour or more, and the fish had towed the boat at least five miles, possibly more, and exhibited very few signs of wearying; so the skipper gave the order to "clap onto the line!" With difficulty, enough slack was secured for all hands to lay on, as the rope was like a band of iron or steel, the big fish swimming on and on with a pertinacity that was appalling, displaying no evidence of slowing up, no signs of failing strength.

There was not sufficient combined muscle in the boat to lift the line an inch, and if it had slipped from the crotch in the bow the dory would have been capsized and wrecked. But the skipper was a man of action, and again he shouted, "Lay on!" All hands except the man with the oar, who brushed the flying scud from his eyes and drank in the wildness of it all, laid on and joined in the strange chanty of the skipper, *A-boy-e-e-bo, a-bo-o, a-bo-o!* But the line, taut as the string of some gigantic harp, never bent, and the skipper swore softly, then ordered the men to get their oars over and try to wear out the beast. There was not a man, however, who could hold an oar against this tremendous rush. The shark had established a pace and evidently proposed keeping it up.

The skipper never relaxed his efforts. He bent

to the rope with an everlasting chanty, and after another half-hour of weary endeavor finally shouted, "He's comin'."

There was a limit to the power of the great fish; the skipper had discovered it, and the men laid on with a shout. Ten feet gained, then ten more, *Ab-be-o, a-way-be* rising into an impossible falsetto that was caught by the wind and carried far away. Now the line is coming in, or the boat is being hauled near the fish, one man coiling. The skipper stops and wipes the spume and salt from his face, glancing at the stiff rope leading ahead. The dory rushes along at steamboat pace. It can be told by the sand dunes moving rapidly by them, but they are gaining. The old schooner has picked up and is ploughing along one hundred yards astern like a hound on the scent, bound to be in at the death.

Suddenly the shark turns; the landsman sees it first, and hauls the dory around desperately with his big oar, while the men lie back like the crews in a tug of war.

Directly inshore the game charges, now evidently "rattled;" then when near the outer breakers turns and for nearly a mile tows the boat in a circle, the men gaining on every turn. Now the skipper drops the rope, which has a limp and listless tension, and seizes the lance pole. The shark is on the surface, its triangular sail-like fin cutting the blue ocean smoothly, its tail moving deliberately

like a gigantic flail, and merrily the men lay on and heave and heave. The landsman breathes in the exciting infection. The end is near; not a moment has he lost in this splendid ocean *divertissement*. The color of the sea, the play of water, the changing of blue into silver as the crest breaks, the passing jelly-fishes resting like laggard meteors, the brilliant colour of the depths seen through the heart of the waves, the rugged men in dripping oilskins, the red faces and blood-shot eyes, all are factors in this picture of the sea, its life and death.

The water is boiling beneath the bow, and the men take a turn, breathe hard a moment, "catch their wind," and stand by for the last haul. No chanty now; the skipper passes the word by raising his pole and the men give way and run the boat aboard the big game; and down into his body, not far from the fin, the skipper pounds his lance, jamming it home.

At the motion the men cast off, grasp the oars that are ready in the oarlocks, and send the dory ahead and to starboard, deftly clearing the swing of the tail as it rises and lashes the water into foam.

A score or more white-winged gulls hover about with wild cries, in at the death, but perhaps protesting. The schooner is up in the wind -to the leeward, and the boy in the rigging is trying to make himself heard above the tattoo of the reefing points, but presently subsides and waves his hat.

The shark has lost its steerage-way ; it wallows in the sea, now shoots ahead; then like a ship that has shifted her ballast, rushes ahead with an ominous list, rolls heavily, desperately, stops ; and while the men stand and wipe their faces and the landsman waves his cap, the great barker, the sun-worshiper, lies prone and motionless, is dead.

The schooner comes round into the wind and lays to near the shark. A sailor jumps onto the back of the victim and throws a shot lance into its skin and makes a line fast; another is passed through a slit in the big dorsal fin, another rope is made fast to the lobe of the tail that is fished up. These are carried to the schooner that runs alongside ; the forward guy is passed around the windlass, and after two hours' hard work the shark is fast and safe alongside, when some idea of its comparative size becomes obtainable,—nearly as long as the vessel, a very whale, the largest of fishes, and good, as the skipper says, for twenty barrels of liver and many gallons of oil.

Stranger game than this colossus can hardly be imagined, one of the leviathans, apparently, that has outlived the age of giants ; a huge, inoffensive creature, typical of all that is big, unwieldy, impossible in nature. Animals of its size are associated with rapacity, but this monster is peaceful when let alone; it does not interfere with the fishes, being satisfied with the smallest game of the sea, jelly-fishes, possibly seaweed,—a giant

whose office in the scale of nature is a mystery, incapable of defending itself except by using its powerful tail, yet so large that doubtless it is seldom if ever attacked and has no enemies; even the orcas, which attack the largest whales and rend them in twain, pass it by.

The shark known as the elephant, bone, and basking-shark roams nearly all temperate seas. Its mouth is comparatively small and bears six or seven rows of very small teeth, perhaps two hundred in a row. The gill openings are enormous; the gill rakers long, close together, and slender, recalling whalebone, hence the name whale shark. The skin is rough, covered with short spines.

Where these monsters live in winter is not known, but doubtless they roam the temperate and semi-tropic seas. In summer they are gregarious, and are seen in schools lying on the surface, seemingly asleep. They reach the New England coast in June and July, the Hebrides and the Frith of Clyde in June, and leave in July. On the Pacific coast they are found off Monterey Bay in July, large schools being seen on the surface, when they can be readily approached.

In former years, and in the early part of the nineteenth century, the fishery for these sharks was as well defined as the whale fishery to-day, and numbers of vessels were employed in hunting them off Cape Cod; so assiduously was the big game followed that in this region, at least, they

were almost exterminated, and while one or more are seen every season, it may be said that they are rare on the Atlantic coast.

The size of these sharks is their most extraordinary feature. Few have been recorded under thirty feet, and several have been taken of truly heroic proportions. The late Daniel Perkins of Ogunquit, Maine, informed me that a neighbor of his was at one time in the business of "bone-sharking," and during a cruise in the schooner Virgin, of Gloucester, they took a shark off Block Island that was as large as a whale. It towed the boat for many hours, and when finally made fast alongside, it was longer than the schooner, which was of sixty-eight tons burden and over seventy feet in length. To quote Mr. Perkins, "They lashed its head to the windlass bitts and its tail extended past the stern." This same day the crew of the Virgin harpooned a shark even larger than this; and a grandfather of the Mr. Perkins quoted saw one alongside his vessel that extended beyond the bow and stern. This fish was so near that they could touch it, and the captain emptied a pan of hot coals on its back to drive it away, not being in the shark business.

These huge sharks range north to Greenland, where at Noarkanek there is a fishery for them, three or four hundred being taken every season, their livers affording about twenty-five hundred barrels of valuable oil. At Fiskenaes and Proven

numbers are killed annually, and the "spec," or "hocwealder," as the Icelanders term the blubber, is used as a legal tender. To these fishermen there is little romance or sport in killing the big fish, the labor being of the most difficult nature. On the Pacific coast thirty or forty of these sharks have been seen at one time off Monterey Bay, lying in groups, like huge logs upon the surface, apparently sunning themselves or "basking." The sharks are at times very inquisitive. An angler stated to the writer that in trolling for salmon in Monterey Bay, he noticed a shark at least forty feet in length, which followed him persistently, keeping its huge head directly beneath the stern of the boat, making no demonstration, yet such a menace that the anglers went inshore.

Some years ago a number of Japanese formed a "bone-shark" fishery, and began to take big game for the livers. Their method was to harpoon them. One large individual was apparently killed, and the men succeeded in lashing it between two heavy boats, and were about to tow it in, when the fish came to life, and with a series of terrific blows wrecked both boats, putting a stop to the work.

This shark is exceeded in size, if reports can be credited, by a spotted shark, *Rhinodon typicus*, fairly common about the Seychelles Islands. Specimens have been reported over seventy feet in length. It is a huge whale-like creature, — its mouth on the extremity of the head, not under; the skin

rough and richly and strikingly marked with dark leopard-like spots, which make it a conspicuous object.

Like its American relative, this shark affects the surface of the water, and often approaches vessels, and has been known to rise beneath them, much to the terror of the crew. Its teeth are small, as in the American shark, and its power lies in its bulk and enormous tail, which it swings from side to side when attacked, with disastrous results. The natives of the Seychelles Islands often attack it, and instances have been known where the fish has dived and taken the light native boats down and completely wrecked them.

An American, fond of large game, took part in the attack on one of these fishes in the Indian Ocean. The animal had been observed in the offing for several days, and as a naturalist had offered a reward for a large specimen, the natives went out after it in several boats, the American going in the largest. They found the *Rhinodon* about two miles off the harbor, a conspicuous object, lying like a big dismantled hulk on the surface, the sea breaking over it. Three boats made the attack at once, two on one side, the third on the other; and at the signal from the head man they all plunged their harpoons into it at the same time and backed off in safety.

The fish lifted its tail into the air, gave a swing which would have wrecked a large boat, sweeping

a radial spread of sixty feet, then plunged downward, sounding like a whale. One of the boats fouled her line and was jerked under water, the men leaping overboard to be picked up by another boat. The boat came up in a few moments completely wrecked by being dragged downward. The shark evidently struck bottom in less than two hundred feet, then rose, and when near the surface started out to sea at a ten-knot pace, leaving the main fleet far behind.

This shark towed the boats twenty miles or more into the night, when the crews, becoming alarmed, cut away. Its size was never determined, but all the men agreed that it was one of the largest dimensions. Later, two medium-sized specimens were secured, one of twenty feet, which is now in the museum at Bombay, and another of forty-nine feet in length.

A very large shark, supposed to be allied to the *Rhinodon* and in a general way marked like it, has been seen in the Gulf of California, but a specimen has never been secured. All these fishes afford a field for the ardent sportsman who desires new game to conquer.

CHAPTER XXII

DOWN BY THE RIO GRANDE

The Jumping Fish of Texas. Aransas Pass Tarpon. The Silver King. Fine Fishing. Some Wild Leapers.

“WHAT you do eef you lif’ one hundred fifty mile from doctor what pull teeth? Las’ night he ache so I go crazy, dats a fac’. I hol’ whiskey een my mouth, try to keel him, get him drunk. I take ‘Cure Queek,’ you know him? I hear he vera fine cure; some gentleman he get patent on him; but I try him, one dollar a bottle—but no good. Then I try pull him myself, but pincers too big, take hol’ two teeth at once. *Woof!* I can’ think of him without ache.”

My boatman, one of the best tarpon-gaffers and oarsmen in Texas, born somewhere on the Austrian and Italian line, had the toothache, down at Tarpon, the most eastern town of southeast Texas, way out on a sand-bank, where the sea pounds in from the Mexican Gulf and the red mud of Rio Grande and Brazos paints the summer sea. He explained that he could not go outside with the toothache; so we compromised and anchored and fished for skipjack and ten-pounders, in the shallows.

"How I get here? Why, I jes' came. I ran een here on ship some year ago, and was so glad I stay; go feeshin' for tarpon, row gentlemen to the Pass. You hear tell of wind-jammer? Well, I come on wind-jammer, and now, I a san'-jammer, you bet. San' blow, blow een, cover my garden, keel my plant, choke my well, cover my house eef I don' sweep and deeg him off. He like life thing, this san'. You watch him, like river glisten in the sun. Look out, sa. Excuse me, sa," as something struck my back, and the boatman grasped a beautiful silvery fish with yellow fins, which had sprung into the boat and which was now held up for my inspection. I saw the ripple where the fish left the water, and it must have cleared eight feet. I was fishing for ten-pounders with shrimp bait, and had cast into a hole, very wide but very shallow.

"We not skunked, anyhow, you bet," said the boatman, as he dropped the game into a box. "Yes, sa," he continued, handing me a big shrimp to try, "I spen' my time san'-jammin', and eef I did n't deeg, why, eet bury me, house and all. Eet mighty curious thing. I come here ten, twelve years ago. Fine climate, cool een summer; I hear him fine place to raise children, plenty health, so I get married. No mosquitoes, plenty feesh, tarpon, and I stay. I like him. I get house, fix him up; have children — every one come, I build on room. I fix up garden, plant vine, orangè, lime,

lemon, all same Italia grape. Water, he plenty, vine grow. I have fine garden; no san', but — look out, sa ; look out ! ”

This time I was looking right at it, and saw a beautiful fish, like a beam of silver, rise from the water and dash at me through the air, covering at least twelve feet. As it neared the boat it turned upon its side and seemed to slide along like a flying-fish, and if I had not leaned forward it would have struck me, but it fell into the boat, leaping and struggling, and as the sand-jammer picked it up and handed it to me I saw that it was another kind of fish, but with yellow fins and tail.

“ We not skunked, sure,” he remarked, lifting the cover of the box and dropping it in ; then he hooked a shrimp on my vacant hook, which I again cast into the shallow hole where an insatiate band of small topgallant-sail sea-cats held forth.

“ As I say, sa, when you caught feesh,” began the boatman, “ I have fine place, but about five year ago January, perhaps February, I don’ know quite, the wind, he change. Most always he blow from east-southeast, blow that way ten years, yes, forty years, so ole man tell me, but all at once he change ; he haul to the south-southeast by south half south and blow hard, terrible storm ; almos’ blow place away, and ever since — watch your head, sa ! how he come ! ” as another fish came ricochetting along, and with a final leap and unerring aim landed in the boat between us.

DOWN BY THE RIO GRANDE

"Pompano, sa, fine feesh. You finding," dropping the big pompano into the water.

"Eh?" I retorted, turning around to give the sand-jammer a good look at the sand-jammer, who was also keeping an eye to windward, dodge any of my catches that were not in the proper spot.

"I say you lucky feesherman. One day you catch one bony feesh, one pompano. As blow hurricane for two, three days; sun and water, and when he clear, in sou'east by east half south, and stay since."

At this moment a broad green bank appeared in the water ten feet distant and a long way off, and I unconsciously ducked.

"Eet no jump, sa, alligator ga feefty pounds, too heavy. 'Nother day you hook." As I cast again he could not be seen, but ever since eet blow up, he had begun to come from the dune, cover me like a cove, choke my pump, hide my vine, choke my rosa, make all like white snow. I do not know day and night; I fight for my home, throw him out in the day he come at me; run like hundred river, make keel grass, keel small tree. Ah! look out."

But the fish with yellow fins which had been leaping and dancing through the air at us missed, and there was a loud splash astern.

"That hard luck, sure. You have hard luck, sa, lose fine feesh."

"Had n't we better drop astern?" I suggested.
"We seem to be getting out of range."

"No, he is all right; reel een, sa; I bait your hook." So I reeled in the hook, the toy of unseen catfish, and as I turned to hand it to the boatman a calico fish, black with yellow spots, shaped like a gigantic bird, at least four feet wide and with a tail like a South African bull whip, shot into the air, four feet clear, and apparently was coming aboard. But it missed us, and I reeled up my line while the sand-jammer looked at it and reached for the anchor rope; then turning, he lifted the well-cover and glanced at the fish, and then at me with a strange expression on his stolid face.

"Eef you have all the fish you want, sa, *I feel my tooth, be ache*. I like to go ashore, eef you don' mind. We not skunked, sa."

"All right," I responded; "pull in." And while he hauled the anchor I watched the big alligator gar, which was preparing for something, as it was so near I could have struck it. In a few moments we were inshore, and landing me on a point, the man rowed up the bay.

"Curious way they have of fishing for skipjacks here," I remarked to a man I met. "You anchor, cast your line, and the fish jump into the boat; you never catch anything with the hook."

The man looked at me in amazement and replied that he had never heard of it.

"Well, you 're a newcomer."

"No," he said, edging off, "I 've been here twenty years."

Later I heard Mateo relating the remarkable history of the day. "Eet 's a fac', we did n't hook a feesh, but three jump een the boat and one or two more tried to."

Tarpon, Texas, is the most remarkable fishing-ground in the world for tarpon, yet comparatively but little known; a cool, delightful fishing-ground way down on the Gulf, where people suppose malaria, yellow fever, and mosquitoes dwell; but picturesque Tarpon and its little bay will some day be a great pleasure and health resort. If for nothing else, it would be famous for its jumping and leaping fishes. I rarely turned my head to look over the shallows that I did not see the gleam of leaping fishes. Inshore, scores of mullets, silver and gray, were darting into the air in twos, singly, or in schools; farther out, ten-pounders shot like animated rockets upward to escape some ravenous foe, while occasionally the gleam of a tarpon cut the air as it rose high above the water.

The reason for this high and lofty tumbling is that the water is very shallow, and when pursued the fish cannot plunge down, so leap into the air; and the distances covered by the leaps were often astonishing. The chief jumpers were two varieties

of jacks, a small "jurel" and a "runner," both with yellow fins; but the pompano, a cousin, was even more remarkable as an acrobat. Once under way, it turned so that its side offered a broad surface to the wind, serving to support it after the fashion of an aëroplane, and in this position it covered distances of twenty or more feet at a high speed.

A friend related to me an instance of the remarkable leaping powers of the pompano. He was sailing up a shallow river, and found that he was driving a large school of them. As the stream grew narrower, they turned and in a body left the water, darting over the yacht, whirling through the air like bullets. Dozens struck the sail and fell aboard, while others cleared the rigging and dropped thirty and forty feet away, making good their escape.

The story of the blowing of the sand I learned was not exaggerated. I ploughed through the deep dunes that afternoon to visit the home of my boatman, and a more remarkable scene of desolation could hardly be imagined. A number of cottages appeared here and there, but all seemed to rest on the surface of a troubled sea, great billows of sand rising on every side. A distant house, which had been surrounded by a grove of trees, was hidden all but the roof, and as I approached the boatman's cottage, a huge bank of the finest, purest sand, cut into strange shapes by the wind,

intervened, through which I waded to find it surrounded by the menacing flood that stretched away, and beneath which were the boatman's gardens, his vines and plants, his grass and walks, buried deep under the resistless flow. A plank had been laid from the sand-bank to the upper veranda, by which I reached the neat and comfortable cottage of the "sand-jammer," who appealed to me to know how he could escape the inevitable. I suggested his jacking up the house, and so keeping on top. The strange change in the prevailing wind undoubtedly resulted in the sand encroaching on the west island, though it was all sand formed by the sea, that in some incomprehensible way has piled up this long reef, whose unstable nature was shown at the time of the Galveston flood.

Mustang Island is said to be the highest island on the coast of Texas, and I ascended some dunes, which may have been twenty feet above the level of the sea; but so fine was the sand that it was ever moving, shifting, and in the noonday sunlight countless rivers of sand could be seen coming along with marvelous rapidity, converging here and there when affected by the wind; sometimes joining, dividing again, ever moving across the white sandy plain, bent on covering up the grass and verdure that still held its own on the western edge of the narrow island.

Mateo, free from toothache, waited for me one

morning in the scale-room of the little inn, where each tarpon angler writes his name and the length of the fish on a large scale and nails it on the wall of this hall of fame that gleams and glitters in the sunlight, a thing of beauty and a joy forever. Tarpon Inn may not shine in an architectural sense, but no other inn in the world can show so remarkable a register or extend a heartier welcome.

Mateo had provided mullets for the tarpon. The boat was at the dock; the tide was in. "Was the gentleman ready?" The gentleman was.

"Shall we get one?" I asked, as Mateo rowed out by the jetty between the sand dunes.

"Getta one?" he cried, and stopped rowing. "Look, sa," and the big back and dorsal spine of a tarpon flashed in the sunlight a second, not twenty feet from the boat. "Why, cert, you getta one, two, plenty, all you want—I swear it. If you don't getta one I give you ma boat. Yes, sa."

A loggerhead turtle rose and looked at me in a melancholy fashion,—a kinsman, doubtless, of many I had turned, in years gone by, across the gulf at Loggerhead Key. Here and there a richly hued Portuguese man-of-war surged down the tide, and in the blue vault above the long-winged man-of-war bird circled; then came a slight tug on the line. I overran one, two feet, then settled back as the line came taut, and with a long surge gave my first Texan tarpon the butt.

There was no doubt about it. It did not need the stifled "Looka there, sa!" from Mateo, as six feet of gleaming silver literally burst, volcano-like, into the air, hovered convulsively a moment, flashing sun rays like electric sparks, hurled the bait at me with a derisive side jerk, and dropped, belly up, with a crash into the sea, to make as clean a one hundred foot rush on the surface as ever fish made,—irresistible, magnificent in its speed. Then this gorgeous living sunburst went into the air again, twisting, whirling, its strange mouth wide open, its gill covers widely expanded in vain effort to toss the hook into the empyrean or anywhere. Then as it came down on the crest of a big green roller, which showed its silvery shape a second in bas-relief, I held it with all the satisfaction that comes to the angler in that vital moment when he has checked the fish, holds it, the rod bending to the danger point, the peculiar thrill, seemingly electric, the echoing throb of countless muscles, bending, surging in the game, telling of fear, astonishment, indecision, and madness as into the air dashes the splendid creature, up, up, four, five, six feet, standing on its tail, a whirling dervish of the sea, now swallowed up by the foaming crest of a wave, to leap into the air again and again in a dazzling saraband on the floor of the restless sea.

All this time Mateo was backing his little skiff for his life, hissing in my ear, "Tak heem in sure,

tak heem in ! Great San José, see him jump !
Eh, cert, he gone ; shark got heem."

I had lived five or six years among Gulf of Mexico sharks over on the reef, and, seeing no fin, believed that Mateo had had a vision. But it was my first attempt to troll for tarpon in Texas; over in Florida they had been taken from the bottom.

I was under the tutelage of a pastmaster whose card should read, "Mateo Brujen, T. D., Doctor of Tarpon;" so when he cried hoarsely, "Tak heem in, sa!" appealing to various saints and gods, I called on the splendid reel for its best and in a few strenuous moments — it was the other way.

"Looka out, sa," cried the doctor, whirling the little craft around on a pivot in his effort to keep me facing the fish and the bow to a threatening sea. "Looka out ! *Sacre* ; he jump aboard."

It was a final and splendid leap not ten feet from the skiff, and the mailed knight in his armor of silver was certainly headed our way ; but he merely threw his spray over us. I caught sight of a splash of red, its wide-open gills ; and the next moment it was away in a magnificent rush, cavorting over the waves, and when stopped, broke water, lashing it into foam far away, and then apparently disappeared from the face of the sea, the line, once tense, vibrant like the string of a lute, lying prone upon the surface.

or more, and tows the game up the pass a mile or so as dead weight.

I claim to have caught my first Texas tarpon, as I brought it to gaff in fifteen or twenty minutes and held it where it could easily have been gaffed; but such a catch would not be allowed by the Tarpon Club, and after I had insisted upon the gaffing of a second fish I was forced to acknowledge that Mateo was right,—it was not safe to gaff a tarpon in the small skiffs used here.

There was little waiting for strikes at Aransas Pass, but the environment of the fishing-ground was such that the eye and ear were constantly regaled as we drifted slowly along the jetty, a snake-like ledge of rocks just above the surface, and so near that a pebble could be tossed ashore. It seemed incomprehensible that fishes six feet or more in length could congregate here, yet along this breakwater and over the submerged portions they undoubtedly floated in great numbers, displaying no fear of the skiffs, rising with puffing sounds here and there ; and strikes were frequent when crossing the rocks with but fifteen or twenty feet of line out from the six or eight boats which formed the flotilla of anglers.

When strikes failed inshore Mateo rowed me out into the Gulf or to the entrance of the pass. To the south a heavy sea was piling in, over a wide range of shallows, reaching as far as the eye could see, rolling ominously over an old wreck

fish according to local rule, so held it well in hand while it swung its lithe, silvery body to and fro, fanning the air, flinging the bait up the line, and falling with a resonant crash not six feet from the submerged jetty ; then I saw it gleaming by my side. It had turned, and like a flash of light made a half-circle around the boat, so that pull as he might the boatman could not swing the flat-bottom boat around in time, and I saw directly over my right shoulder (it must have been good luck) the blazing fish, so high that blue sky was visible beneath it, and so near that for a second I almost believed that it was coming aboard. But Mateo jerked the skiff around so that I faced the foam that marked its disappearance, while the whistling of the reel told of the splendid rush directly across the channel of the pass.

I had been told at the little inn of a certain tarpon, hoary with age, knotted with muscles, with scales a foot across and eyes like the hawshole of a twenty-gun frigate, which haunted the pass, defying all comers, well known as "Yucatan Bill." His game when hooked was to head for Yucatan, — not around by the buoy, but directly through the breakers across country ; and as my fish in one wild bound seemed to cross the entire channel, rising into the air against the white spume which hung over the reef, I thought that I was in the hands of the Yucatan bounder.

"See, see heem jump !" said Mateo over

the boat, having developed new life, hammering the bottom with its powerful tail, beating the seats with great upward bends ; and as Mateo fairly threw himself upon it lest it should leap into the sea, a shout was heard from another boat where my example was being emulated. The boatman had gaffed a good-sized fish, which, the moment it reached the boat, involved angler and rower in a maze of convolutions. My own troubles were forgotten in the extraordinary spectacle of a fish, gaffer, and angler all going down together amid a clash of oars, gaffs, and rods, the gleaming fish evidently on top ! That the entire crew did not go over was a miracle.

In the meantime some one else had hooked a tarpon which was leaping in our vicinity, and Mateo glanced up from the fish he was attempting to hold down and cast an eye to windward to see that the tarpon did not come aboard ; then he rose slowly and looked at himself, smeared from head to foot with blood and slime. Mateo was an Austrian, but he had a remarkable command of the English language, and if half the saints who were invoked responded, the future of Yuca-tan Bill is not to be envied. Yet this gamy fish measured but five feet four inches, made to order to fit the niche on my study wall opposite to a certain tuna which capsized my boat a mile off-shore in the Santa Catalina Channel.

The action of this fish was an illustration of the

"He looka pleasant, all right," responded Mateo, hooking on another mullet.

The next fish I hooked resulted in a fine picture of the constellation of Arcturus, or where it should be somewhere overhead, and later attempts when developed displayed an excellent collection of clouds and sky effects of the Aransas Pass region. Then I followed another angler and snapped the camera on his fish, which leaped in front of me, and am confident that I caught it, but an ancient film or some accident caused a drawing of twelve blanks.

The leap of this splendid fish has been taken by a number of anglers, among them Dr. W. H. Howe of Mexico, who conceived a gun camera for the purpose, and doubtless some effective pictures will be secured sooner or later illustrating the gurations of this lofty tumbler.

Interested to experiment with hooked tarpon, comparing trolling to still fishing, I made a speical effort to hold several. One leaped within ten feet of the boat in water twelve feet deep, reversed itself, and dashed around the boat in plain sight, canted over at an angle of 45° . My line was slack, but I gave the reel a whirl, then checked it, which sent the fish high into the air not twenty feet distant, so that I could distinctly see the method of freeing itself. When completely out of water, standing upright, it bent so that head and tail seemed almost to meet. It was the pulling

inner pass day and night, where the water is like a mill-pond ; and the vast numbers of fish here and the character of the fishing can be understood when it is said that out of a fleet of a dozen boats six would have tarpon leaping at once and the question of avoiding the crazed silver kings was an important one. I do not intend to estimate the height of the tarpon leaps I saw at Aransas, but one angler has recorded that he saw a tarpon leap fifteen feet into the air, passing over a boat containing two gentlemen, ten feet above their heads. It was my fortune to meet one of the above, who described his sensations as the silver king literally poised over them.

When many boats are out, they are often strung along the jetty near one another, and it would be an easy matter for a tarpon to leap into a boat and wreck it. My boatman told me that he saw a man nearly killed by one.

The angler he was rowing had a strike, the fish rising and making an extraordinary leap, passing over the next boat, striking the chair of the angler and knocking him into the water, from which he was dragged, demoralized but unhurt, by his boatman. In Galveston Bay a boat was found floating in which were the dead bodies of a man and a tarpon. The fish very probably had struck the man and killed him, as from one to two hundred pounds of armored vitality shooting through the air with convulsive lateral motion is sufficient to

first of November, when the cool northerers apparently drive them south to the vicinity of Tampico, where they are found all winter, and it is said with even more vigor and fighting capacity.

line or by twos on the edge of a singular mud line that came drifting in from the Gulf. The first man to get his line out caught the first fish. He had a gigantic pole, almost twenty feet in length, of a single tip, with a short line, and the way he snaked the fish in was a "caution to sinners;" at least this is a description that a Waco woman gave later on. The man bore a charmed life, and it is a wonder that no one was shot that day when he caught two hundred and sixty mackerel while others got comparatively few. Yet every one caught the fish, and exciting sport it was. The mackerel ranged up to eight pounds, averaging five, and bit on the run, bending the light rods almost double as they rushed out into the pass, around the boats, to the confusion of others, and when six or eight people had the golden fish on at the same time the scene was engrossing and spirited.

Some of the fish leaped into the air — a flash of silver, a gleam of gold — to plunge down again into the channel. Faster grew the sport. Up they came. A shout from some woman angler, a yell from an up-the-State man who had never seen anything like it; then something happened. No one had a strike for several minutes, and all hands moved ten or fifteen feet out into the channel ; but no bites ; even the man with the colossal rod failed. Then came a scream from a woman angler, and not three feet from the boat or her right hand, rose a triangular fin of a deep dun color.

which latter he stuffed so naturally that it was difficult to believe they were dead. Bill had a shark line, and being an obliging fellow, rounded to, anchored in the midst of the shark-infested fleet, and, hooking on several Spanish mackerel, provided by the victims, having buoyed up the line with a float, cast into the pass.

Evidently the shark had heard the conversation and had disappeared, but in a short time the piece of wood sank with a jerk ; Bill gave a yell, and every boatman hauled up his anchor and pulled for Bill's boat. The Waco lady protested, but as Bill remarked afterward, she was lost in the shuffle. It happened that her boat fastened to Bill's first ; the second made fast to it, and quicker than can be told a line of a dozen or more boats had formed ; at the right moment Bill jerked the hook into the shark, and the procession moved on, with a rush that made the startled woman from Waco sit down ; in fact, everybody went down as that shark got under way. Bill lay back and shouted to all hands to pull, but for the first few moments the shark had it all its own way and went sturdily out through the pass, headed for the open Gulf, much to the terror of the women and the delight of the children. But presently one boat after another got its oars out and pulled, and finally stopped the monster, and then slowly edged in to the beach.

"If I ever get onto that sand you'll never see me in a boat again," said the Waco female.

sands with loud shouts, resenting the operation by snapping its jaws and bending into vicious curves, straightening out with marvelous power. Nearer it came, until its gaping, many-toothed jaws were fully exposed around a mouth large enough to encompass a man. Clinging to its tawny hide were several remoras, or sucking fishes, which retained their position even after the spoiler of the Spanish mackerel fishing was high and dry on the sands.

This shark was ten or twelve feet long, and must have weighed 1600 pounds at least, and was a fair sample of the big sharks which follow large schools of game fish, preying upon them when occasion offers. Exactly how long a regular man-eater grows is not known, but the captain of the ship *Raja* captured one which measured thirty-four feet.

The shark had driven the Spanish mackerel away, so the anglers, excepting the woman from Waco, who walked home over the sand dunes, adjourned to the inner bay and fished for channel bass.

Gulf from its scales, and moves southward, picking up large schools at Pass Christian, Galveston, Aransas, Corpus Christi, and other places, and the so-called passes or channels which break through the outer sand-banks of this coast; until a huge army of tarpon is collected, moving south, arriving at Tampico sometimes in December, just in time to afford the genial Mexican good fishing in cool weather, but he will none of it.

"You Americans are a queer people," said a young Mexican on the river.

"Why so?" asked the man with a rod.

"You are so easily imposed upon. Call any hard work sport, and you jump at it. You cannot get a Mexican to go fishing for tarpon on any terms. He will fish for a living if he can sell the fish, but tarpon! One, two, three hours working like a burro, for what? when you might be sitting in the shade drinking cocktails or sleeping."

This genial gentleman would not go fishing; he disliked to be a witness to my friend's exertion, so they compromised, and he sat on the bank at the mouth of the river near some big palms and smoked while my friend and proxy went fishing. It was somewhat difficult to find a good boatman; indeed the one they first secured was not a tarpon expert, though they were told he had been out with a man who *bad* taken a tarpon, and when asked if the fish were biting he replied, "Mucho bueno tarpon." The boat was a clumsy craft, but

every time the angler made a leading remark he merely smiled, and once he swore quietly,—one can understand that in any language. So there was nothing to do but go. The friend on the bank was an insurance man, and they left orders that if he saw them go down, he should immediately take out large policies; and thus, having arranged their temporal affairs, they took the seats and pushed off, the big sombrero pulling them slowly into the stream.

There is a charm about the Tropics if you do not mind the heat. The groves of cocoanuts, the luxuriant foliage, the soft, hot wind from the Gulf, the clear water and the aroma of something in the air,—it is all fascinating, whether you get any fish or not. But they were here to fish, and took out the rods. Not one man or woman in fifty thousand has taken a tarpon, so the tackle may be of interest. The rods were made of Bathebara wood, which is a species of greenheart which comes from Brazil, and were seven feet long, the tip being five feet and the butt two feet long. The guides were big agate affairs, and the tip had a five-dollar agate to run the line through, which could be unscrewed and the size changed.

Every point about this rod was perfect. There was nothing cheap about it, and it cost about \$35. Then came the reel; this particular one, which my friend the big fisherman used, cost \$75. It was a perfect machine, and by giving the handle a swing

just where the fish ought to be, and told them some tarpon stories that would have given Walton the nightmare ; tarpon that knocked men out of the boat, tarpon that defied all capture, tarpon that leaped — unutterable feet, tarpon that no man could land.

But here my proxy had a strike and nearly lost his rod by having it jerked out of his hands ; then the boatman cried, "Look out!" pulling on one oar rapidly. He saw something in the air nearly over his head, something that loomed up like a six-foot bar of molten silver swinging end for end ; then it fell with a crash not three feet from the boat, and he realized that the defamed boatman had possibly saved his head. But there was not time to think ; something like a twenty-horse-power engine was jerking the line from the reel. He could not see the handle and could barely hold the rod ; then, five hundred feet distant, into the air went a splendid fish. Certainly not his ? Yes, it was still going and on, too. So he jammed his thumb onto the leather pad, leaned against it, pushed at it with both hands, and tried all the manœuvres, at last stopping this wild colt when he had but fifty feet or so of line left. The fish was always in the air now, at least so it appeared to him ; and the boatman, clever man, was telling him in soliloquy how well he did it, with fine disdain passing over the fact that he was really being done by the fish.

Now it is hammering you with sledge-hammer blows, now you are dodging it as it tries to come aboard, and the vision of a one hundred and sixty pound tarpon with mouth open and gills afame coming at you along the air, is appalling.

You wish to get out and run; you would like to dodge, but all you can do is to reel and let your boatman do the dodging with the oars. The angler who was found dead under a dead tarpon, drifting in a boat in Galveston Bay some years ago, had no one to dodge for him, and the tarpon landed.

But just as the proxy thought he was going, he had it. The fish charged under the boat, and he took it up to within twenty feet and gave it the butt, at the call of his trainer, the oarsman, who cried, "Give it to him, Señor!" and the angler knew that meant, Go in and win. His eyes were salty and staring. His veins felt like whip-cords, and the water was pouring down from his face. His second wind was coming, and there was not money enough in the Treasury (Mexican or American) to buy his delight or sensations. The tarpon was pulling like a tug, towing the boat and swimming in a circle; then he reeled quickly, and the splendid creature — blue on top, or was it green? — fell in behind and was held while Señor Garcia pulled for the shore, because to gaff and land such a "demon fish" was unsafe, — there were man-eaters off the jetty.

the Gulf wind on their cheeks. Six tarpons, two jackfish was the bag, and they rowed in to tell the tale to the insurance man, who pitied them ; then they went over to the veranda of the consulate, and in the cool of the evening talked it over and endeavored to enthuse the Mexican, but failed utterly and completely. Their insurance friend said that he could hire a peon to fish for him at ten cents a day, so what was the use of it ? Thus we see why the Columbians would never have built the canal.

I have heard that going into battle by proxy or substitute is often very satisfactory to the man who does not go. Once when a very young boy I made a desperate effort to enter the army of the Civil War as a drummer. I learned to drum and was all ready ; but a stern and just parent, an officer in the service, stood between me and the service. A boy two years older, fourteen years of age, secured the place, and I was heartbroken, but was consoled by being told that Jack — who had been my playmate, and who was the son of a brave private soldier who had been killed — would go as my proxy. I followed Jack's career with a fond and personal interest. In the first battle that the regiment entered, Jack was among the first killed. In some way he got to the very front, — he was that kind of boy, — and was marching along with head up, cheered by the men, when he fell. I can conceive the advantage



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